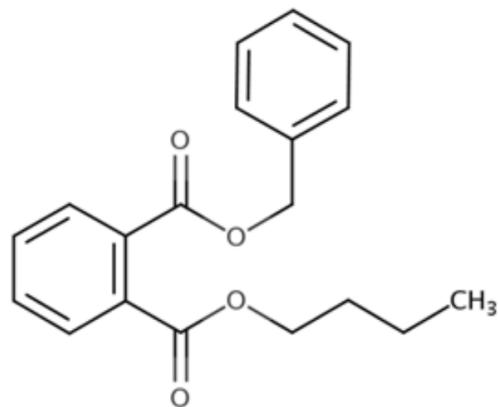


**Data Extraction Information for
General Population, Consumer, and Environmental Exposure for
Butyl benzyl phthalate (BBP)
(1,2-Benzenedicarboxylic acid, 1-butyl 2-(phenylmethyl) ester)**

Systematic Review Support Document for the Draft Risk Evaluation

CASRN: 85-68-7



July 2025

This supplemental file contains information regarding the data extraction results for data sources that met the PECO screening criteria for the *Draft Consumer and Indoor Dust Exposure Assessment for Butyl benzyl phthalate (BBP)*, *Draft Environmental Media and GenPop Screening for Butyl benzyl phthalate (BBP)*, *Draft Biomonitoring Assessment for Butyl benzyl phthalate (BBP)* (*NHANES*), and *Draft Environmental Exposure Assessment for Butyl benzyl phthalate (BBP)*, 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*. The systematic review steps are further described in the *Draft Risk Evaluation for Butyl benzyl phthalate (BBP)*, referred hereafter as the “BBP 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 reported by the study. For further details about extraction criteria, review the BBP 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 BBP Data Extraction Information for General Population, Consumer, and Environmental Exposure.

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Butyl benzyl phthalate

Monitoring

Ambient Air

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
Cousins et al. 2007 HERO ID: 675060 OQD: Medium	Stenungsund, SE Scenario: Ambient air from Stenugsund, industrial point source (n = 3; DF = 1.0; Sampling Period: Nov., 2006 - Apr., 2007)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [0.11 ng/m ³ ; 0.039 ng/m ³ ; 0.07 ng/m ³]				
Cousins et al. 2007 HERO ID: 675060 OQD: Medium	Gislaved, SE Scenario: Ambient air from industrial point source (n = 3; DF = 1.0; Sampling Period: Nov., 2006 - Apr., 2007)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [0.034 ng/m ³ ; 0.023 ng/m ³ ; 0.029 ng/m ³]				
Cousins et al. 2007 HERO ID: 675060 OQD: Medium	Stockholm, SE Scenario: Ambient air from Stockholm, Wollmar Yxkullsg .25, urban diffuse source (n = 3; DF = 1.0; Sampling Period: Nov., 2006 - Apr., 2007)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [0.17 ng/m ³ ; 0.12 ng/m ³ ; 0.12 ng/m ³]				
Cousins et al. 2007 HERO ID: 675060 OQD: Medium	Rao, SE Scenario: Ambient air from background source (n = 3; DF = 1.0; Sampling Period: Nov., 2006 - Apr., 2007)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [0.022 ng/m ³ ; 0.028 ng/m ³ ; 0.06 ng/m ³]				
Quintana-Belmares et al. 2018 HERO ID: 4167514 OQD: Medium	Mexico City, MX Scenario: Ambient air PM2.5 measures from roof of medical clinic (n = 21; DF = 0.14; Sampling Period: Nov., 2012 - May, 2013)	LOD: Not Reported LOQ: Not Reported	ND	7.2 µg/g	NR	NR	NR
Quintana-Belmares et al. 2018 HERO ID: 4167514 OQD: Medium	Mexico City, MX Scenario: Ambient air PM10 measures from roof of medical clinic (n = 21; DF = 0; Sampling Period: Nov., 2012 - May, 2013)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Salapasidou et al. 2011 HERO ID: 1249468 OQD: High	Thessaloniki, GR Scenario: Ambient PM10 at urban-traffic site in Thessaloniki, Greece (n = 10; DF = 1; Sampling Period: Jan., 2007 - Feb., 2007)	LOD: Not Reported LOQ: Not Reported	0.04 ng/m ³	0.98 ng/m ³	0.56 ng/m ³ (AM)	50th: 0.64 ng/m ³ ;	0.33 ng/m ³ (ASD)
Salapasidou et al. 2011 HERO ID: 1249468 OQD: High	Thessaloniki, GR Scenario: Ambient PM10 at urban-industrial site in Thessaloniki, Greece (n = 10; DF = 0.9; Sampling Period: Jan., 2007 - Feb., 2007)	LOD: Not Reported LOQ: Not Reported	<LOD	0.8 ng/m ³	0.44 ng/m ³ (AM)	50th: 0.44 ng/m ³ ;	0.26 ng/m ³ (ASD)
Blanchard et al. 2013 HERO ID: 1315297 OQD: High	Paris, FR Scenario: Outdoor air from roof of university (n = 6; DF = NR; Sampling Period: May, 2008 - Sept., 2008)	LOD: Not Reported LOQ: 5.0 pg/m ³	NR	NR	0.425 ng/m ³ (AM)	NR	NR
Moreau-Guigon et al. 2016 HERO ID: 3470397 OQD: Medium	Paris, FR Scenario: Outdoor air during non-heating season (n = 6; DF = NR; Sampling Period: Sept., 2011 - Nov., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	0.21 ng/m ³ (AM)	NR	0.16 ng/m ³ (ASD)

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Butyl benzyl phthalate

Monitoring

Ambient Air

Table 1 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Moreau-Guigou et al. 2016 HERO ID: 3470397 OQD: Medium	Paris, FR Scenario: Outdoor air during heating season (n = 6; DF = NR; Sampling Period: Jan., 2012 - Mar., 2012)	LOD: Not Reported LOQ: Not Reported	NR	NR	0.072 ng/m ³ (AM)	NR	0.061 ng/m ³ (ASD)
Baek et al. 2020 HERO ID: 6950643 OQD: Medium	Ulsan, KR Scenario: Ambient air from residential area in Ulsan (n = 181; DF = 1; Sampling Period: Spring, 2009 - winter, 2010)	LOD: 0.01 - 0.12 ppb LOQ: Not Reported	0.45 ng/m ³	3.15 ng/m ³	1.39 ng/m ³ (AM)	50th: 0.57 ng/m ³ ;	1.53 ng/m ³ (ASD)
Baek et al. 2020 HERO ID: 6950643 OQD: Medium	Ulsan, KR Scenario: Ambient air from multi-industrial city of Ulsan (n = 181; DF = 1; Sampling Period: Spring, 2009 - winter, 2010)	LOD: 0.01 - 0.12 ppb LOQ: Not Reported	0.28 ng/m ³	0.33 ng/m ³	0.31 ng/m ³ (AM)	50th: 0.305 ng/m ³ ;	0.04 ng/m ³ (ASD)

Butyl benzyl phthalate

Monitoring

Aquatic Species

Table 2: Data Extraction Tables of Exposure Monitoring Studies for Aquatic Species

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Lin et al. 2003 HERO ID: 680053 OQD: High	Vancouver, BC, CA Scenario: Striped Seaperch from North Central False Creek Harbor (n = 9; DF = NR; Sampling Period: Jan., 2003)	LOD: 0.5 ng/g LOQ: Not Reported	NR	NR	3.57 ppb (AM)	NR	0.77 ppb (ASD)
Lin et al. 2003 HERO ID: 680053 OQD: High	Vancouver, BC, CA Scenario: Striped Seaperch from East Basin False Creek Harbor (n = 9; DF = NR; Sampling Period: Jan., 2003)	LOD: 0.5 ng/g LOQ: Not Reported	NR	NR	0.30 ppb (AM)	NR	0.20 ppb (ASD)
Lin et al. 2003 HERO ID: 680053 OQD: High	Vancouver, BC, CA Scenario: Striped Seaperch from Marina South False Creek Harbor (n = 9; DF = NR; Sampling Period: Jan., 2003)	LOD: 0.5 ng/g LOQ: Not Reported	NR	NR	0.75 ppb (AM)	NR	0.10 ppb (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Green algae from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.56 ng/g (AM)	NR	0.74 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Brown algae from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.29 ng/g (AM)	NR	0.25 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Plankton from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.83 ng/g (AM)	NR	0.39 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Blue mussels from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.29 ng/g (AM)	NR	0.30 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Geoduck clams from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.61 ng/g (AM)	NR	0.52 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Manila clams from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.26 ng/g (AM)	NR	0.19 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Pacific oysters from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.11 ng/g (AM)	NR	0.32 ng/g (ASD)

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Butyl benzyl phthalate

Monitoring

Aquatic Species

Table 2 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Dungeness crabs (hepatopancreas) from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.04 ng/g (AM)	NR	0.16 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Purple seastar (cross-section) from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	1.47 ng/g (AM)	NR	0.15 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Juvenile shiner perch from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	1.93 ng/g (AM)	NR	0.21 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Pacific herring (muscle) from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	1.67 ng/g (AM)	NR	0.04 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Pile perch (muscle) from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.82 ng/g (AM)	NR	0.54 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Striped seaperch (muscle) from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.90 ng/g (AM)	NR	0.45 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Pacific staghorn sculpin (muscle) from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.85 ng/g (AM)	NR	0.29 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: English sole (muscle) from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.51 ng/g (AM)	NR	0.40 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: White-spotted greenling (muscle) from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.15 ng/g (AM)	NR	0.49 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 OQD: Low	Vancouver, British Columbia, CA Scenario: Spiny dogfish (muscle) from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	1.61 ng/g (AM)	NR	0.29 ng/g (ASD)

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Butyl benzyl phthalate

Monitoring

Aquatic Species

Table 2 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Mackintosh et al. 2004 HERO ID: 789501 <i>OQD:</i> Low	Vancouver, British Columbia, CA Scenario: Spiny dogfish (liver) from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	1.18 ng/g (AM)	NR	0.36 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 <i>OQD:</i> Low	Vancouver, British Columbia, CA Scenario: Spiny dogfish (embryo) from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	1.81 ng/g (AM)	NR	0.09 ng/g (ASD)
Mackintosh et al. 2004 HERO ID: 789501 <i>OQD:</i> Low	Vancouver, British Columbia, CA Scenario: Surf scoters (liver) from 3 False Creek Harbor sampling stations (n = 9; DF = 0.95; Sampling Period: Jun., 1999 - Sept., 1999)	LOD: Not Reported LOQ: Not Reported	NR	NR	3.15 ng/g (AM)	NR	0.11 ng/g (ASD)
Valton et al. 2014 HERO ID: 2347469 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Île-de-France district, FR Scenario: Liver tissue of common roach (n = 4; DF = NR; Sampling Period: Jun., 2014)	LOD: 2.0 pg LOQ: 9.0 ng/g	NR	NR	19.7 ng/g (AM)	NR	4.9 ng/g (ASD)
Valton et al. 2014 HERO ID: 2347469 <i>OQD:</i> Medium	Île-de-France district, FR Scenario: Muscle tissue of common roach (n = 4; DF = NR; Sampling Period: Jun., 2014)	LOD: 2.0 pg LOQ: 9.0 ng/g	NR	NR	155 ng/g (AM)	NR	20 ng/g (ASD)
Valton et al. 2014 HERO ID: 2347469 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Île-de-France district, FR Scenario: Plasma of common roach (n = 4; DF = NR; Sampling Period: Jun., 2014)	LOD: 0.1 pg LOQ: 4.0 pg/mL	NR	NR	17.1 ng/mL (AM)	NR	0.14 ng/mL (ASD)
Valton et al. 2014 HERO ID: 2347469 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Île-de-France district, FR Scenario: Bile of common roach (n = 4; DF = NR; Sampling Period: Jun., 2014)	LOD: 0.1 pg LOQ: 5.0 pg/mL	NR	NR	0.81 ng/mL (AM)	NR	0.09 ng/mL (ASD)
Lee et al. 2019 HERO ID: 5043593 <i>OQD:</i> High	Pyeongtaek and Asan, Gyeonggi Province, KR Scenario: Lake Fish affected from industrial complex (n = 30; DF = 0.10; Sampling Period: Oct., 2016 - Jul., 2017)	LOD: 0.26 µg/kg LOQ: 0.78 µg/kg	ND	65.0 µg/kg	3.0 µg/kg (AM)	NR	NR
McConnell et al. 2007 HERO ID: 10365669 <i>OQD:</i> High	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Green macroalgae from False Creek Harbour (n = 8; DF = 1; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 12.0 ng/g LOQ: 18.0 ng/g	NR	NR	NR	NR	NR
McConnell et al. 2007 HERO ID: 10365669 [‡] <i>OQD:</i> High <i>MBzP</i>	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Green macroalgae from False Creek Harbour - MBzP (n = 8; DF = 0; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 0.063 ng/g LOQ: 0.066 ng/g	NR	NR	ND	NR	NR

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Butyl benzyl phthalate

Monitoring

Aquatic Species

Table 2 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
McConnell et al. 2007 HERO ID: 10365669 [‡] <i>OQD:</i> High <i>MBzP</i>	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Blue mussel from False Creek Harbour - MBzP (n = 10; DF = 0.7; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 0.33 ng/g LOQ: Not Reported	NR	NR	0.64 ng/g (AM)	NR	2.6 ng/g (ASD)
McConnell et al. 2007 HERO ID: 10365669 <i>OQD:</i> High	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Blue mussel from False Creek Harbour (n = 10; DF = 0.8; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 0.78 ng/g LOQ: 2.1 ng/g	NR	NR	1.4 ng/g (AM)	NR	1.8 ng/g (ASD)
McConnell et al. 2007 HERO ID: 10365669 [‡] <i>OQD:</i> High <i>MBzP</i>	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Softshell clam from False Creek Harbour - MBzP (n = 10; DF = 0; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 0.32 ng/g LOQ: 0.33 ng/g	NR	NR	ND	NR	NR
McConnell et al. 2007 HERO ID: 10365669 <i>OQD:</i> High	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Softshell clam from False Creek Harbour (n = 10; DF = 1; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 2.6 ng/g LOQ: 4.2 ng/g	NR	NR	3.1 ng/g (AM)	NR	2.6 ng/g (ASD)
McConnell et al. 2007 HERO ID: 10365669 [‡] <i>OQD:</i> High <i>MBzP</i>	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Dungeness crab (muscle) from False Creek Harbour - MBzP (n = 13; DF = 0.08; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 0.066 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
McConnell et al. 2007 HERO ID: 10365669 <i>OQD:</i> High	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Dungeness crab (muscle) from False Creek Harbour (n = 13; DF = 0.62; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 0.8 ng/g LOQ: 2.1 ng/g	NR	NR	1.1 ng/g (AM)	NR	1.6 ng/g (ASD)
McConnell et al. 2007 HERO ID: 10365669 [‡] <i>OQD:</i> High <i>MBzP</i>	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Dungeness crab (hepatopancreas) from False Creek Harbour - MBzP (n = 13; DF = 0.15; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 0.32 ng/g LOQ: 0.87 ng/g	NR	NR	ND	NR	NR
McConnell et al. 2007 HERO ID: 10365669 <i>OQD:</i> High	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Dungeness crab (hepatopancreas) from False Creek Harbour (n = 13; DF = 0.85; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 7.8 ng/g LOQ: 19.0 ng/g	NR	NR	10 ng/g (AM)	NR	2.1 ng/g (ASD)
McConnell et al. 2007 HERO ID: 10365669 [‡] <i>OQD:</i> High <i>MBzP</i>	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Juvenile shiner Perch from False Creek Harbour - MBzP (n = 7; DF = 0.71; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 0.066 ng/g LOQ: 0.2 ng/g	NR	NR	0.54 ng/g (AM)	NR	5.7 ng/g (ASD)
McConnell et al. 2007 HERO ID: 10365669 <i>OQD:</i> High	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Juvenile shiner Perch from False Creek Harbour (n = 7; DF = 0.71; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 8.0 ng/g LOQ: 12.0 ng/g	NR	NR	7.9 ng/g (AM)	NR	2.0 ng/g (ASD)

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Butyl benzyl phthalate

Monitoring

Aquatic Species

Table 2 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
McConnell et al. 2007 HERO ID: 10365669 [‡] <i>OQD:</i> High <i>MBzP</i>	Strait of Georgia, Vancouver, British Columbia, CA Scenario: White Spotted Greenling (muscle) from False Creek Harbour - MBzP (n = 9; DF = 0.11; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 0.066 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
McConnell et al. 2007 HERO ID: 10365669 <i>OQD:</i> High	Strait of Georgia, Vancouver, British Columbia, CA Scenario: White Spotted Greenling (muscle) from False Creek Harbour (n = 9; DF = 0.89; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 2.6 ng/g LOQ: 5.2 ng/g	NR	NR	1.3 ng/g (AM)	NR	1.4 ng/g (ASD)
McConnell et al. 2007 HERO ID: 10365669 [‡] <i>OQD:</i> High <i>MBzP</i>	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Spiny dogfish (muscle) from False Creek Harbour - MBzP (n = 12; DF = 0; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 0.22 ng/g LOQ: 0.65 ng/g	NR	NR	ND	NR	NR
McConnell et al. 2007 HERO ID: 10365669 [‡] <i>OQD:</i> High <i>MBzP</i>	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Spiny dogfish (liver) from False Creek Harbour - MBzP (n = 12; DF = 0; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 0.68 ng/g LOQ: 2.2 ng/g	NR	NR	ND	NR	NR
McConnell et al. 2007 HERO ID: 10365669 <i>OQD:</i> High	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Spiny dogfish (muscle) from False Creek Harbour (n = 12; DF = 1; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 12.0 ng/g LOQ: 18.0 ng/g	NR	NR	16 ng/g (AM)	NR	2.9 ng/g (ASD)
McConnell et al. 2007 HERO ID: 10365669 <i>OQD:</i> High	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Spiny dogfish (liver) from False Creek Harbour (n = 12; DF = 0.75; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 190.0 ng/g LOQ: 210.0 ng/g	NR	NR	180 ng/g (AM)	NR	2.2 ng/g (ASD)
Huang et al. 2008 HERO ID: 675207 <i>OQD:</i> High	TW Scenario: Phthalate concentrations in <i>Oreochromis niloticus</i> (single) from Taiwan (n = 12; DF = NR; Sampling Period: Aug., 2004 - Apr., 2005)	LOD: 0.006 mg/kg LOQ: Not Reported	ND	3.8 mg/kg	0.741 mg/kg (AM)	NR	NR
Huang et al. 2008 HERO ID: 675207 <i>OQD:</i> High	TW Scenario: Phthalate concentrations in <i>Liza subviridis</i> (single) from Taiwan (n = 7; DF = NR; Sampling Period: Aug., 2004 - Apr., 2005)	LOD: 0.006 mg/kg LOQ: Not Reported	ND	26.8 mg/kg	6.37 mg/kg (AM)	NR	NR
Huang et al. 2008 HERO ID: 675207 <i>OQD:</i> High	TW Scenario: Phthalate concentrations in <i>Acanthopagrus schlegeli</i> (single) from Taiwan (n = 1; DF = 1; Sampling Period: Aug., 2004 - Apr., 2005)	LOD: 0.006 mg/kg LOQ: Not Reported	NR	NR	2 mg/kg (AM)	NR	NR
Huang et al. 2008 HERO ID: 675207 <i>OQD:</i> High	TW Scenario: Phthalate concentrations in <i>Acrossocheilus paradoxus</i> (single) from Taiwan (n = 1; DF = 1; Sampling Period: Aug., 2004 - Apr., 2005)	LOD: 0.006 mg/kg LOQ: Not Reported	NR	NR	0.15 mg/kg (AM)	NR	NR

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Table 2 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Huang et al. 2008 HERO ID: 675207 <i>OQD:</i> High	TW Scenario: Phthalate concentrations in Zacco platypus (pooled) from Taiwan (n = 3; DF = NR; Sampling Period: Aug., 2004 - Apr., 2005)	LOD: 0.006 mg/kg LOQ: Not Reported	ND	28.2 mg/kg	9.4 mg/kg (AM)	NR	NR
Blair et al. 2009 HERO ID: 787951 ‡ <i>OQD:</i> Medium <i>MBzP</i>	Vancouver, British Columbia, CA Scenario: blue mussels from False Creek, Vancouver (n = 10; DF = 0.90; Sampling Period: May, 2004 - Sept., 2006)	LOD: 0.06 ng/g LOQ: Not Reported	<LOD	1.74 ng/g	NR	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> High	Hong Kong, HK Scenario: Tilapia from fish markets in Hong Kong. (n = 10; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.05 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> High	Hong Kong, HK Scenario: Spotted snakehead fish from fish markets in Hong Kong. (n = 10; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.08 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> High	Hong Kong, HK Scenario: Snakehead fish from fish markets in Hong Kong. (n = 12; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.07 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> High	Hong Kong, HK Scenario: Rice field eel from fish markets in Hong Kong. (n = 14; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.05 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> High	Hong Kong, HK Scenario: Mud carp from fish markets in Hong Kong. (n = 15; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.08 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> High	Hong Kong, HK Scenario: Mandarin fish from fish markets in Hong Kong. (n = 3; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.06 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> High	Hong Kong, HK Scenario: Grey mullet from fish markets in Hong Kong. (n = 18; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.07 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> High	Hong Kong, HK Scenario: Grass carp from fish markets in Hong Kong. (n = 6; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.07 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> High	Hong Kong, HK Scenario: Catfish from fish markets in Hong Kong. (n = 21; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.10 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> High	Hong Kong, HK Scenario: Bighead carp from fish markets in Hong Kong. (n = 6; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.08 µg/g (AM)	NR	NR

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Butyl benzyl phthalate

Monitoring

Aquatic Species

Table 2 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Cheng et al. 2013 HERO ID: 1600107 OQD: High	Hong Kong, HK Scenario: Yellow seafin from fish markets in Hong Kong. (n = 1; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.11 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 OQD: High	Hong Kong, HK Scenario: Yellow croaker from fish markets in Hong Kong. (n = 9; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.10 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 OQD: High	Hong Kong, HK Scenario: Tongue sole from fish markets in Hong Kong. (n = 15; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.10 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 OQD: High	Hong Kong, HK Scenario: Snubnose pompano from fish markets in Hong Kong. (n = 18; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.04 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 OQD: High	Hong Kong, HK Scenario: Orange spotted grouper from fish markets in Hong Kong. (n = 9; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.06 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 OQD: High	Hong Kong, HK Scenario: Golden threadfin bream from fish markets in Hong Kong. (n = 9; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.10 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 OQD: High	Hong Kong, HK Scenario: Goldspotted rabbitfish from fish markets in Hong Kong. (n = 15; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.07 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 OQD: High	Hong Kong, HK Scenario: Bleeker's grouper from fish markets in Hong Kong. (n = 36; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.06 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 OQD: High	Hong Kong, HK Scenario: Bigeye from fish markets in Hong Kong. (n = 10; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.05 µg/g (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 OQD: High	Hong Kong, HK Scenario: Bartail flathead from fish markets in Hong Kong. (n = 33; DF = NR; Sampling Period: May, 2009 - Nov., 2009)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	0.12 µg/g (AM)	NR	NR
Teil et al. 2014 HERO ID: 2149497 OQD: Medium	Roinville, FR Scenario: Fish from Orge River at Roinville (n = 7; DF = NR; Sampling Period: Sept., 2008)	LOD: 8.8 pg/L LOQ: Not Reported	NR	NR	1.0 ng/g (AM)	NR	0.017 ng/g (ASD)

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Butyl benzyl phthalate

Monitoring

Aquatic Species

Table 2 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Teil et al. 2014 HERO ID: 2149497 <i>OQD:</i> Medium	Viry-Chatillon, FR Scenario: Fish from Orge River at Viry-Chatillon (n = 8; DF = NR; Sampling Period: Oct., 2009)	LOD: 8.8 pg/L LOQ: Not Reported	NR	NR	136 ng/g (AM)	NR	20 ng/g (ASD)
Teil et al. 2014 HERO ID: 2149497 <i>OQD:</i> Medium	Marnay-sur-Seine, FR Scenario: Fish from Seine River at Marnay-sur-Seine (n = 8; DF = NR; Sampling Period: Aug., 2009)	LOD: 8.8 pg/L LOQ: Not Reported	NR	NR	101 ng/g (AM)	NR	112 ng/g (ASD)
Teil et al. 2014 HERO ID: 2149497 <i>OQD:</i> Medium	Epinay-sur-Seine, FR Scenario: Fish from Seine River at Epinay-sur-Seine (n = 9; DF = NR; Sampling Period: Aug., 2008)	LOD: 8.8 pg/L LOQ: Not Reported	NR	NR	175 ng/g (AM)	NR	289 ng/g (ASD)
Teil et al. 2014 HERO ID: 2149497 <i>OQD:</i> Medium	Triel-sur-Seine, FR Scenario: Fish from Seine River at Triel-sur-Seine (n = 12; DF = NR; Sampling Period: Nov., 2009)	LOD: 8.8 pg/L LOQ: Not Reported	NR	NR	161 ng/g (AM)	NR	375 ng/g (ASD)

‡ Data extraction results are for metabolite concentrations.

Butyl benzyl phthalate

Monitoring

Dietary

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

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Ma et al. 2015 HERO ID: 3016266 OQD: High	Nanjing, China, CN Scenario: Vegetables from 19 greenhouses in Gu Li village (n = 19; DF = 0.68; Sampling Period: Dec., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	0 µg/kg (ASD)
Ma et al. 2015 HERO ID: 3016266 OQD: High	Nanjing, China, CN Scenario: Vegetables from 15 greenhouses in Hu Shu village (n = 15; DF = 0.87; Sampling Period: Dec., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	13 µg/kg (AM)	NR	1 µg/kg (ASD)
Ma et al. 2015 HERO ID: 3016266 OQD: High	Nanjing, China, CN Scenario: Vegetables from 9 greenhouses in Suo Shi village (n = 9; DF = 0.89; Sampling Period: Dec., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	70 µg/kg (AM)	NR	0 µg/kg (ASD)
Ma et al. 2015 HERO ID: 3016266 OQD: High	Nanjing, China, CN Scenario: Vegetables from 18 greenhouses in Planck farm (n = 18; DF = 1.0; Sampling Period: Dec., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	10 µg/kg (AM)	NR	0 µg/kg (ASD)
Sun et al. 2016 HERO ID: 3455519 OQD: Medium	Jiangsu Province; Shanghai Municipality, CN Scenario: Cabbage from agriculture fields (n = 26; DF = 0.46; Sampling Period: Nov., 2014)	LOD: 0.20–0.40 ng/g LOQ: Not Reported	ND	81.4 ng/g	10.4 ng/g (AM)	NR	18.1 ng/g (ASD)
Wu et al. 2019 HERO ID: 5433502 OQD: High	Yuyao City, Zhejiang Province, CN Scenario: Vegetable samples from downwind of a plastic market (n = 21; DF = 1.0; Sampling Period: May, 2017)	LOD: Not Reported LOQ: 2.3 ng/g	0.9 ng/g	9.1 ng/g	3.7 ng/g (AM)	50th: 2.4 ng/g;	NR
Wei et al. 2020 HERO ID: 6816706 OQD: Medium	Anhui, Jiangsu, Shanghai, and Zhejiang Provinces, Yangtze River Delta, CN Scenario: Vegetables grown in agricultural area of China (n = 228; DF = 0.22; Sampling Period: Oct., 2018)	LOD: 0.1 ng/g LOQ: Not Reported	ND	33.7 ng/g	2.42 ng/g (AM)	50th: ND;	NR
Fierens et al. 2013 HERO ID: 1332529 OQD: Medium	BE Scenario: Pasteurised milk from industry cooling tank in Belgium (n = 3; DF = NR; Sampling Period: Nov., 2010)	LOD: Not Reported LOQ: 10 µg/kg	ND	14 µg/kg	NR	50th: ND;	NR
Fierens et al. 2013 HERO ID: 1332529 OQD: Medium	BE Scenario: Milk powder after filling can from industry in Belgium (n = 3; DF = 1; Sampling Period: Nov., 2010)	LOD: Not Reported LOQ: 10 µg/kg	11 µg/kg	13 µg/kg	NR	50th: 12 µg/kg;	NR
Fierens et al. 2013 HERO ID: 1332529 OQD: Medium	BE Scenario: Milk powder after filling pouch from industry in Belgium (n = 3; DF = 1; Sampling Period: Nov., 2010)	LOD: Not Reported LOQ: 10 µg/kg	43 µg/kg	61 µg/kg	NR	50th: 53 µg/kg;	NR
Fierens et al. 2013 HERO ID: 1332529 OQD: Medium	BE Scenario: Milk powder in can from retail in Belgium (n = 3; DF = 1; Sampling Period: Feb., 2011)	LOD: Not Reported LOQ: 10 µg/kg	12 µg/kg	13 µg/kg	NR	50th: 12 µg/kg;	NR

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Butyl benzyl phthalate

Monitoring

Dietary

Table 3 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Fierens et al. 2013 HERO ID: 1332529 OQD: Medium	BE Scenario: Milk powder in pouch from retail in Belgium (n = 3; DF = 1; Sampling Period: Feb., 2011)	LOD: Not Reported LOQ: 10 µg/kg	41 µg/kg	68 µg/kg	NR	50th: 65 µg/kg;	NR
Fierens et al. 2013 HERO ID: 1332529 OQD: Medium	BE Scenario: Milk (Tetra Brik) from retail in Belgium (n = 5; DF = NR; Sampling Period: Mar., 2010 - Sept., 2010)	LOD: Not Reported LOQ: 10 µg/kg	ND	<LOQ	NR	50th: ND;	NR
Fierens et al. 2013 HERO ID: 1332529 OQD: Medium	BE Scenario: Semi-mature cheese from retail in Belgium (n = 1; DF = 1; Sampling Period: Sept., 2010)	LOD: Not Reported LOQ: 10 µg/kg	NR	NR	NR	50th: <LOQ;	NR
Sakhi et al. 2014 HERO ID: 2501495 OQD: Medium	Oslo, Norway, NO Scenario: Ready to eat foods from market basket in Oslo (n = 2; DF = 0.3; Sampling Period: Apr., 2012)	LOD: Not Reported LOQ: 0.5-20 µg/kg	ND	5.7 µg/kg	NR	50th: 2.9 µg/kg;	NR
Sakhi et al. 2014 HERO ID: 2501495 OQD: Medium	Oslo, Norway, NO Scenario: Meat and meat products from market basket in Oslo (n = 8; DF = 0.3; Sampling Period: Apr., 2012)	LOD: Not Reported LOQ: 2.5 - 20 µg/kg	ND	78 µg/kg	NR	50th: ND;	NR
Sakhi et al. 2014 HERO ID: 2501495 OQD: Medium	Oslo, Norway, NO Scenario: Beverages from market basket in Oslo (n = 4; DF = 0; Sampling Period: Apr., 2012)	LOD: Not Reported LOQ: 0.03 µg/kg	ND	0.19 µg/kg	NR	50th: ND;	NR
Sakhi et al. 2014 HERO ID: 2501495 OQD: Medium	Oslo, Norway, NO Scenario: Grain and grain products from market basket in Oslo (n = 5; DF = 0.3; Sampling Period: Apr., 2012)	LOD: Not Reported LOQ: 0.5 µg/kg	ND	3.5 µg/kg	NR	50th: 0.82 µg/kg;	NR
Sakhi et al. 2014 HERO ID: 2501495 OQD: Medium	Oslo, Norway, NO Scenario: Fish and fish products from market basket in Oslo (n = 6; DF = 0.3; Sampling Period: Apr., 2012)	LOD: Not Reported LOQ: 2.5 - 20 µg/kg	ND	32 µg/kg	NR	50th: ND;	NR

Table 4: Data Extraction Tables of Exposure Monitoring Studies for Drinking Water

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Shi et al. 2012 HERO ID: 1249969 OQD: High	Changzhou, Yangtze River Delta, China, CN Scenario: Finished water from waterworks for Changzhou (n = 3; DF = 1.0; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	9.6 ng/L (AM)	NR	1.5 ng/L (ASD)
Shi et al. 2012 HERO ID: 1249969 OQD: High	Changzhou, Yangtze River Delta, China, CN Scenario: Tap water from Changzhou (n = 3; DF = 1.0; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	7.0 ng/L (AM)	NR	0.1 ng/L (ASD)
Shi et al. 2012 HERO ID: 1249969 OQD: High	Suzhou, Yangtze River Delta, China, CN Scenario: Finished water from waterworks from Suzhou (n = 3; DF = 1.0; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	ND	NR	NR
Shi et al. 2012 HERO ID: 1249969 OQD: High	Suzhou, Yangtze River Delta, China, CN Scenario: Tap water from Suzhou (n = 3; DF = 1.0; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	0.8 ng/L (AM)	NR	0.3 ng/L (ASD)
Shi et al. 2012 HERO ID: 1249969 OQD: High	Wuxi, Yangtze River Delta, China, CN Scenario: Finished water from waterworks for Wuxi (n = 3; DF = 1.0; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	25 ng/L (AM)	NR	0.4 ng/L (ASD)
Shi et al. 2012 HERO ID: 1249969 OQD: High	Wuxi, Yangtze River Delta, China, CN Scenario: Tap water from Wuxi (n = 3; DF = 1.0; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	24 ng/L (AM)	NR	1.0 ng/L (ASD)
Shi et al. 2012 HERO ID: 1249969 OQD: High	Xuzhou, Yangtze River Delta, China, CN Scenario: Finished water from waterworks for Xuzhou (n = 3; DF = 0; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	ND	NR	NR
Shi et al. 2012 HERO ID: 1249969 OQD: High	Xuzhou, Yangtze River Delta, China, CN Scenario: Tap water from Xuzhou (n = 3; DF = 0; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	ND	NR	NR
Shi et al. 2012 HERO ID: 1249969 OQD: High	Yancheng, Yangtze River Delta, China, CN Scenario: Finished water from waterworks for Yancheng (n = 3; DF = 1.0; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	1.3 ng/L (AM)	NR	0.2 ng/L (ASD)
Shi et al. 2012 HERO ID: 1249969 OQD: High	Yancheng, Yangtze River Delta, China, CN Scenario: Tap water from Yancheng (n = 3; DF = 1.0; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	1.9 ng/L (AM)	NR	0.3 ng/L (ASD)
Roy F. Weston Inc et al. 1980 HERO ID: 1333014 OQD: Medium	Philadelphia, Pennsylvania, US Scenario: Drinking water from City of Philadelphia, upstream of chemical facility (n = 2; DF = 0.5; Sampling Period: Apr., 1979 - Dec., 1979)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [0.6 µg/L; — µg/L]				
Le Coadou et al. 2017 HERO ID: 3864659 OQD: High	Multiple regions of France, FR Scenario: Bottled natural mineral water from France (n = 24; DF = 0; Sampling Period: Jul., 2013 - Sept., 2013)	LOD: Not Reported LOQ: 5.0 ng/L	NR	NR	<LOQ	NR	NR

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Butyl benzyl phthalate

Monitoring

Drinking Water

Table 4 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Le Coadou et al. 2017 HERO ID: 3864659 OQD: High	Luxembourg, LU Scenario: Bottled natural mineral water from Luxembourg (n = 1; DF = 0; Sampling Period: Jul., 2013 - Sept., 2013)	LOD: Not Reported LOQ: 5.0 ng/L	NR	NR	<LOQ	NR	NR
Le Coadou et al. 2017 HERO ID: 3864659 OQD: High	Multiple regions of France, FR Scenario: Packaged Spring Water from France (n = 12; DF = 0; Sampling Period: Jul., 2013 - Sept., 2013)	LOD: Not Reported LOQ: 5.0 ng/L	NR	NR	<LOQ	NR	NR
Le Coadou et al. 2017 HERO ID: 3864659 OQD: High	New Caledonia, NC Scenario: Packaged Spring Water from New Caledonia (n = 1; DF = 0; Sampling Period: Jul., 2013 - Sept., 2013)	LOD: Not Reported LOQ: 5.0 ng/L	NR	NR	<LOQ	NR	NR
Le Coadou et al. 2017 HERO ID: 3864659 OQD: High	Italy, IT Scenario: Packaged Spring Water from Italy (n = 1; DF = 0; Sampling Period: Jul., 2013 - Sept., 2013)	LOD: Not Reported LOQ: 5.0 ng/L	NR	NR	<LOQ	NR	NR
Le Coadou et al. 2017 HERO ID: 3864659 OQD: High	Reunion Island, RE Scenario: Packaged Spring Water from Reunion Island (n = 1; DF = 0; Sampling Period: Jul., 2013 - Sept., 2013)	LOD: Not Reported LOQ: 5.0 ng/L	NR	NR	<LOQ	NR	NR
Sulentic et al. 2018 HERO ID: 5043505 OQD: Medium	Cluj-Napoca, RO Scenario: Kitchen tap drinking water from homes (n = 10; DF = 0; Sampling Period: Jun., 2017 - Jul., 2017)	LOD: 0.015 µg/L LOQ: Not Reported	NR	NR	NR	NR	NR
Sulentic et al. 2018 HERO ID: 5043505 OQD: Medium	Cluj-Napoca, RO Scenario: Gas and still bottled water (n = 10; DF = 0; Sampling Period: Jun., 2017 - Jul., 2017)	LOD: 0.015 µg/L LOQ: Not Reported	NR	NR	NR	NR	NR
Lorraine et al. 2006 HERO ID: 5743010 OQD: Medium	San Diego County, CA, US Scenario: 4 WFP intake (raw water) (n = 13; DF = 0.15; Sampling Period: Aug., 2001 - Jun., 2002)	LOD: 0.033 µg/L LOQ: Not Reported	0.053 µg/L	1.19 µg/L	0.622 µg/L (AM)	NR	NR
Lorraine et al. 2006 HERO ID: 5743010 OQD: Medium	San Diego County, CA, US Scenario: 3 WFP effluent (finished drinking water) (n = 15; DF = 0.33; Sampling Period: Aug., 2001 - Jun., 2002)	LOD: 0.033 µg/L LOQ: Not Reported	0.056 µg/L	0.911 µg/L	0.552 µg/L (AM)	NR	NR
Bach et al. 2020 HERO ID: 6957772 OQD: High	France, FR Scenario: Raw water for public water system (source: surface water) (n = 114; DF = 0.007; Sampling Period: Nov., 2015 - Jul., 2016)	LOD: Not Reported LOQ: 50.0 ng/L	NR	<LOQ	<50 ng/L (AM)	NR	NR
Bach et al. 2020 HERO ID: 6957772 OQD: High	France, FR Scenario: Raw water for public water system (source: groundwater) (n = 157; DF = 0.007; Sampling Period: Nov., 2015 - Jul., 2016)	LOD: Not Reported LOQ: 50.0 ng/L	NR	<LOQ	NR	NR	NR

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Table 4 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Bach et al. 2020 HERO ID: 6957772 OQD: High	France, FR Scenario: Treated drinking water in public water system (source: surface water) (n = 89; DF = 0; Sampling Period: Nov., 2015 - Jul., 2016)	LOD: Not Reported LOQ: 50.0 ng/L	NR	<LOQ	<LOQ	NR	NR
Bach et al. 2020 HERO ID: 6957772 OQD: High	France, FR Scenario: Treated drinking water in public water system (source: groundwater) (n = 166; DF = 0; Sampling Period: Nov., 2015 - Jul., 2016)	LOD: Not Reported LOQ: 500.0 ng/L	NR	<LOQ	<50 ng/L (AM)	NR	NR
Blanchard et al. 2013 HERO ID: 1315297 OQD: High	Paris, FR Scenario: Plain spring water and plain mineral water (n = 11; DF = NR; Sampling Period: 2008)	LOD: Not Reported LOQ: 2.0 ng/L	NR	NR	10.69 ng/L (AM)	NR	8.018 ng/L (ASD)
Blanchard et al. 2013 HERO ID: 1315297 OQD: High	Paris, FR Scenario: sparkling mineral water (n = 4; DF = NR; Sampling Period: 2008)	LOD: Not Reported LOQ: 2.0 ng/L	NR	NR	5.345 ng/L (AM)	NR	1.069 ng/L (ASD)
Blanchard et al. 2013 HERO ID: 1315297 OQD: High	Paris, FR Scenario: tap water (n = 3; DF = NR; Sampling Period: 2008)	LOD: Not Reported LOQ: 2.0 ng/L	NR	NR	3.742 ng/L (AM)	NR	NR

Butyl benzyl phthalate

Monitoring

Dust (Indoor)

Table 5: Data Extraction Tables of Exposure Monitoring Studies for Dust (Indoor)

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Rudel et al. 2001 HERO ID: 198234 OQD: High	Massachusetts, US Scenario: Indoor dust from residential and office areas - BBP (n = 6; DF = 1.00; Sampling Period: 2001)	LOD: Not Reported LOQ: 0.125 µg	12.1 µg/g	524 µg/g	117 µg/g (AM)	NR	184 µg/g (ASD)
Bergh et al. 2011 HERO ID: 788335 OQD: Medium	Stockholm, SE Scenario: Indoor dust in 10 homes (n = 10; DF = NR; Sampling Period: 2010)	LOD: Not Reported LOQ: Not Reported	3.1 µg/g	110 µg/g	31 µg/g (AM)	50th: 17 µg/g;	NR
Bergh et al. 2011 HERO ID: 788335 OQD: Medium	Stockholm, SE Scenario: Indoor dust in 10 day cares (n = 10; DF = NR; Sampling Period: 2010)	LOD: Not Reported LOQ: Not Reported	9.0 µg/g	120 µg/g	47 µg/g (AM)	50th: 31 µg/g;	NR
Bergh et al. 2011 HERO ID: 788335 OQD: Medium	Stockholm, SE Scenario: Indoor dust in 10 workplaces (n = 10; DF = NR; Sampling Period: 2010)	LOD: Not Reported LOQ: Not Reported	1.4 µg/g	110 µg/g	19 µg/g (AM)	50th: 8.8 µg/g;	NR
Wallner et al. 2012 HERO ID: 1313395 OQD: Medium	Vienna; Graz; St. Polten; Carinthia, AT Scenario: Indoor dust from 9 urban and elementary schools (n = 36; DF = 1; Sampling Period: Fall, 2012 - Spring, 2013)	LOD: Not Reported LOQ: Not Reported	14 mg/kg	500 mg/kg	NR	50th: 34 mg/kg;	NR
Zhang et al. 2013 HERO ID: 1598628 OQD: High	Nanjing, CN Scenario: Indoor dust from 215 urban houses (n = 215; DF = 0.93; Sampling Period: Mar., 2011 - Jun., 2011)	LOD: 1.8 ng/g LOQ: Not Reported	ND	38.7 µg/g	2.9 µg/g (AM); 0.9 µg/g (GM)	50th: 1.6 µg/g; 95th: 9.7 µg/g;	0.004 µg/g (GSD)
Xu et al. 2015 HERO ID: 2347161 OQD: High	Austin, Texas; central Pennsylvania, US Scenario: BBP HVAC filter dust from 14 retail stores (n = 14; DF = 0.67; Sampling Period: 2013)	LOD: 0.18 µg/g LOQ: Not Reported	<LOD	3260 µg/g	272 µg/g (AM)	10th: <LOD; 25th: <LOD; 50th: 44 µg/g; 75th: 194 µg/g; 90th: 515 µg/g;	674 µg/g (ASD)
Dodson et al. 2015 HERO ID: 2816371 OQD: Medium	Richmond and Bolinas, California, US Scenario: Indoor dust from nonsmoking homes (n = 49; DF = 0.98; Sampling Period: 2006)	LOD: 0.2 µg/g LOQ: Not Reported	- µg/g	330 µg/g	NR	50th: 19 µg/g; 95th: 220 µg/g;	NR
Philippat et al. 2015 HERO ID: 2914664 OQD: Medium	CA, US Scenario: Dust from carpeting in homes (n = 145; DF = .99; Sampling Period: 2010 - 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	5th: 1.07 µg/g; 25th: 5.24 µg/g; 50th: 13.4 µg/g; 75th: 34.1 µg/g; 95th: 200 µg/g;	NR
Subedi et al. 2017 HERO ID: 3860935 OQD: High	Silver Spring, MD, US Scenario: Childcare facilities dust Silver Spring, MD -BBP (n = 1; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL				POINT VALUE(S): [63.4 µg/g]	
Subedi et al. 2017 HERO ID: 3860935 OQD: High	Waco, TX, US Scenario: Childcare facilities dust Waco, Texas -BBP (n = 3; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL				POINT VALUE(S): [714 µg/g; 3080 µg/g; 712 µg/g]	

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Butyl benzyl phthalate

Monitoring

Dust (Indoor)

Table 5 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Subedi et al. 2017 HERO ID: 3860935 OQD: High	Murray, KY, US Scenario: Childcare facilities dust Murray, Kentucky -BBP (n = 4; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL		POINT VALUE(S): [61.3 µg/g; 61.4 µg/g; 81.6 µg/g; 143 µg/g]			
Subedi et al. 2017 HERO ID: 3860935 OQD: High	West Lafayette, IN, US Scenario: Childcare facilities dust West Lafayette, Indiana -BBP (n = 1; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL		POINT VALUE(S): [355 µg/g]			
Subedi et al. 2017 HERO ID: 3860935 OQD: High	Hubbard, OH, US Scenario: Childcare facilities dust Hubbard, Ohio -BBP (n = 1; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL		POINT VALUE(S): [27.0 µg/g]			
Subedi et al. 2017 HERO ID: 3860935 OQD: High	Brookings, SD, US Scenario: Childcare facilities dust Brookings, South Dakota -BBP (n = 1; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL		POINT VALUE(S): [138 µg/g]			
Subedi et al. 2017 HERO ID: 3860935 OQD: High	El Cerrito, CA, US Scenario: Childcare facilities dust El Cerrito, California -BBP (n = 1; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL		POINT VALUE(S): [60.1 µg/g]			
Subedi et al. 2017 HERO ID: 3860935 OQD: High	Medway, MA, US Scenario: Homes dust Medway, Massachusetts -BBP (n = 1; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL		POINT VALUE(S): [52.4 µg/g]			
Subedi et al. 2017 HERO ID: 3860935 OQD: High	Silver Spring, MD, US Scenario: Homes dust Silver Spring, Maryland -BBP (n = 1; DF = 0; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL		POINT VALUE(S): [ND]			
Subedi et al. 2017 HERO ID: 3860935 OQD: High	Murray, KY, US Scenario: Homes dust Murray, Kentucky -BBP (n = 4; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL		POINT VALUE(S): [23.8 µg/g; 52.4 µg/g; 1230 µg/g; 46.0 µg/g]			
Subedi et al. 2017 HERO ID: 3860935 OQD: High	Waco, TX, US Scenario: Homes dust Waco, Texas -BBP (n = 2; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL		POINT VALUE(S): [434 µg/g; 390 µg/g]			
Subedi et al. 2017 HERO ID: 3860935 OQD: High	San Diego, CA, US Scenario: Homes dust San Diego, California -BBP (n = 1; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL		POINT VALUE(S): [25.0 µg/g]			
Subedi et al. 2017 HERO ID: 3860935 OQD: High	El Cerrito, CA, US Scenario: Homes dust El Cerrito, California -BBP (n = 2; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL		POINT VALUE(S): [47.5 µg/g; 51.2 µg/g]			
Subedi et al. 2017 HERO ID: 3860935 OQD: High	Murray, KY, US Scenario: Salons dust Murray, Kentucky -BBP (n = 3; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL		POINT VALUE(S): [68.2 µg/g; 55.7 µg/g; 31.5 µg/g]			

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Butyl benzyl phthalate

Monitoring

Dust (Indoor)

Table 5 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Subedi et al. 2017 HERO ID: 3860935 <i>OQD:</i> High	Lafayette, IN, US Scenario: Salons dust Lafayette, Indiana -BBP (n = 1; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL			POINT VALUE(S): [194 µg/g]		
Subedi et al. 2017 HERO ID: 3860935 <i>OQD:</i> High	Waco, TX, US Scenario: Salons dust Waco, Texas -BBP (n = 1; DF = 1; Sampling Period: Sept., 2016 - Oct., 2016)	LOD: 0.140 - 278 ng/mL LOQ: 0.460 - 926 ng/mL			POINT VALUE(S): [788 µg/g]		
Velázquez-Gómez et al. 2019 HERO ID: 5043338 <i>OQD:</i> Medium	Barcelona, ES Scenario: Settled indoor dust from 11 homes (n = 11; DF = 1; Sampling Period: 2019)	LOD: Not Reported LOQ: Not Reported	114 ng/g	3937 ng/g	NR	50th: 967 ng/g;	NR
Velázquez-Gómez et al. 2019 HERO ID: 5043338 <i>OQD:</i> Medium	Barcelona, ES Scenario: Settled indoor dust from 4 museums (n = 6; DF = 1; Sampling Period: 2019)	LOD: Not Reported LOQ: Not Reported	441 ng/g	17662 ng/g	NR	50th: 1851 ng/g;	NR
Velázquez-Gómez et al. 2019 HERO ID: 5043338 <i>OQD:</i> Medium	Barcelona, ES Scenario: Settled indoor dust from 14 cars (n = 14; DF = 1; Sampling Period: 2019)	LOD: Not Reported LOQ: Not Reported	410 ng/g	7613 ng/g	NR	50th: 1221 ng/g;	NR
Velázquez-Gómez et al. 2019 HERO ID: 5043338 <i>OQD:</i> Medium	Barcelona, ES Scenario: Settled indoor dust from 17 public libraries (n = 21; DF = 1; Sampling Period: 2019)	LOD: Not Reported LOQ: Not Reported	1089 ng/g	9199 ng/g	NR	50th: 3136 ng/g;	NR
Velázquez-Gómez et al. 2019 HERO ID: 5043338 <i>OQD:</i> Medium	Barcelona, ES Scenario: Settled indoor dust from 6 high schools (n = 6; DF = 1; Sampling Period: 2019)	LOD: Not Reported LOQ: Not Reported	846 ng/g	11332 ng/g	NR	50th: 2761 ng/g;	NR
Hammel et al. 2019 HERO ID: 5532853 <i>OQD:</i> High	Durham, North Carolina, US Scenario: Dust from playrooms and living rooms of homes with 3-6 year-old children (n = 188; DF = 0.99; Sampling Period: Sept., 2014 - Apr., 2016)	LOD: 172 ng/g LOQ: Not Reported	ND	NR	NR	50th: 13641 ng/g; 95th: 13641 ng/g;	NR
Huang et al. 2019 HERO ID: 5618703 <i>OQD:</i> High	Kaohsiung, Tainan, Pingdong, TW Scenario: Indoor dust from bedrooms in Southern Taiwan (n = 47; DF = 0.13; Sampling Period: May, 2012 - Apr., 2014)	LOD: 0.11 µg/g LOQ: Not Reported	ND	16.10 µg/g	NR	50th: ND;	NR
Huang et al. 2019 HERO ID: 5618703 <i>OQD:</i> High	Kaohsiung, Tainan, Pingdong, TW Scenario: Indoor dust from elementary school in Southern Taiwan (n = 53; DF = 0.56; Sampling Period: May, 2012 - Apr., 2014)	LOD: 0.11 µg/g LOQ: Not Reported	ND	385.63 µg/g	NR	50th: 2.00 µg/g;	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Huang et al. 2019 HERO ID: 5618703 OQD: High	Kaohsiung, Tainan, Pingdong, TW Scenario: Indoor dust from kindergarten in Southern Taiwan (n = 72; DF = 0.29; Sampling Period: May, 2012 - Apr., 2014)	LOD: 0.11 µg/g LOQ: Not Reported	ND	270.40 µg/g	NR	50th: ND;	NR
Huang et al. 2019 HERO ID: 5618703 OQD: High	Kaohsiung, Tainan, Pingdong, TW Scenario: Indoor dust from home in Southern Taiwan (n = 122; DF = 0.20; Sampling Period: May, 2012 - Apr., 2014)	LOD: 0.11 µg/g LOQ: Not Reported	ND	252.20 µg/g	NR	50th: ND;	NR
Huang et al. 2019 HERO ID: 5618703 OQD: High	Kaohsiung, Tainan, Pingdong, TW Scenario: Indoor dust from living rooms in Southern Taiwan (n = 75; DF = 0.27; Sampling Period: May, 2012 - Apr., 2014)	LOD: 0.11 µg/g LOQ: Not Reported	ND	252.20 µg/g	NR	50th: ND;	NR
Başaran et al. 2020 HERO ID: 6813710 OQD: Medium	Kocaeli Province, TR Scenario: Indoor dust from homes (n = 90; DF = 1; Sampling Period: Feb., 2016 - Apr., 2016)	LOD: Not Reported LOQ: 0.087 ng/g	1.18 µg/g	495.33 µg/g	52.79 µg/g (AM)	50th: 19.54 µg/g; 123.6 µg/g (ASD)	
Kanazawa et al. 2010 HERO ID: 697390 OQD: Medium	Sapporo, JP Scenario: Dust from multi-surfaces of residential detached homes (n = 41; DF = 0.927; Sampling Period: Oct., 2006 - Jan., 2006)	LOD: 0.2 mg/kg LOQ: Not Reported	<LOD	35.8 mg/kg	NR	50th: 2.4 mg/kg;	NR
Kanazawa et al. 2010 HERO ID: 697390 OQD: Medium	Sapporo, JP Scenario: Dust from floor of residential detached homes (n = 41; DF = 0.976; Sampling Period: Oct., 2006 - Jan., 2006)	LOD: 0.2 mg/kg LOQ: Not Reported	<LOD	52.1 mg/kg	NR	50th: 4.2 mg/kg;	NR
Orecchio et al. 2013 HERO ID: 1936014 OQD: Medium	Palermo, Italy, IT Scenario: Indoor dust in Palermo, Italy (n = 14; DF = 1.0; Sampling Period: 2013)	LOD: 9 µg/kg LOQ: Not Reported	NR	NR	99 mg/kg (AM)	NR	
Fromme et al. 2013 HERO ID: 2215411 OQD: Medium	Bavaria, Berlin, and North Rhine-Westfalia, DE Scenario: Dust samples from German daycare centers (n = 63; DF = 0.95; Sampling Period: Nov., 2011 - May, 2012)	LOD: 1 mg/kg LOQ: Not Reported	<1.0 mg/kg	348 mg/kg	21 mg/kg (AM)	50th: 6 mg/kg; 95th: 93 mg/kg;	NR
Shin et al. 2014 HERO ID: 2215665 OQD: High	Northern California, Southeast Pennsylvania, Northeast Maryland, US Scenario: Dust from the living rooms of homes (n = 30; DF = 1.0; Sampling Period: 2009 - 2010)	LOD: 0.012 µg/g LOQ: Not Reported	NR	156.0 µg/g	24.1 µg/g (AM)	50th: 14.9 µg/g;	31.4 µg/g (ASD)
Mercier et al. 2014 HERO ID: 2298081 OQD: High	FR Scenario: Dust samples from French dwellings. (n = 7; DF = 1.0; Sampling Period: 2014)	LOD: 65.8 ng/g LOQ: 132.0 ng/g	Sample 1: 138000 ng/g ; Sample 2: 3780 ng/g ; Sample 3: 3840 ng/g ; Sample 4: 16800 ng/g ; Sample 5: 7210 ng/g ; Sample 6: 6120 ng/g ; Sample 7: 4880 ng/g				

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Ait Bamai et al. 2014 HERO ID: 2345943 <i>OQD:</i> High	Sapporo; Fukushima; Nagoya; Osaka; Okayama; Fukuoka, JP Scenario: Dust from floors in homes in Japan (n = 148; DF = 0.986; Sampling Period: Sept., 2006 - Dec., 2006)	LOD: 0.2 µg/g LOQ: Not Reported	<LOD	60.5 µg/g	NR	25th: 0.8 µg/g; 50th: 1.9 µg/g; 75th: 3.9 µg/g;	NR
Ait Bamai et al. 2014 HERO ID: 2345943 <i>OQD:</i> High	Sapporo; Fukushima; Nagoya; Osaka; Okayama; Fukuoka, JP Scenario: Dust from multi-surfaces in homes in Japan (n = 120; DF = 0.958; Sampling Period: Sept., 2006 - Dec., 2006)	LOD: 0.2 µg/g LOQ: Not Reported	<LOD	431 µg/g	NR	25th: 0.9 µg/g; 50th: 1.7 µg/g; 75th: 3.9 µg/g;	NR
Takeuchi et al. 2015 HERO ID: 3005686 <i>OQD:</i> Medium	11 prefectures, JP Scenario: Indoor dust from 19 suburban living rooms (n = 19; DF = 0.89; Sampling Period: Oct., 2013 - Jan., 2014)	LOD: Not Reported LOQ: Not Reported	NR	290 µg/g	NR	50th: 4.7 µg/g;	NR
Bi et al. 2015 HERO ID: 3019857 <i>OQD:</i> High	Dover, Delaware, US Scenario: Dust from indoor floors of apartments in Dover, Delaware. (n = 7; DF = 1.0; Sampling Period: Mar., 2013)	LOD: 0.108 mg/kg LOQ: 0.359 mg/kg	5.7 mg/kg	525 mg/kg	146 mg/kg (AM)	50th: 68 mg/kg;	198 mg/kg (ASD)
Bi et al. 2015 HERO ID: 3019857 <i>OQD:</i> High	Dover, Delaware, US Scenario: Dust from indoor floors of houses in Dover, Delaware. (n = 10; DF = 1.0; Sampling Period: Mar., 2013)	LOD: 0.108 mg/kg LOQ: 0.359 mg/kg	8.0 mg/kg	619 mg/kg	94 mg/kg (AM)	50th: 29 mg/kg;	187 mg/kg (ASD)
Bi et al. 2015 HERO ID: 3019857 <i>OQD:</i> High	Dover, Delaware, US Scenario: Dust from indoor floors of house garages in Dover, Delaware. (n = 3; DF = 1.0; Sampling Period: Mar., 2013)	LOD: 0.108 mg/kg LOQ: 0.359 mg/kg	12 mg/kg	55 mg/kg	36 mg/kg (AM)	50th: 36 mg/kg;	34 mg/kg (ASD)
Bi et al. 2015 HERO ID: 3019857 <i>OQD:</i> High	Dover, Delaware, US Scenario: Dust from indoor floors of student dormitories in Dover, Delaware. (n = 5; DF = 1.0; Sampling Period: Mar., 2013)	LOD: 0.108 mg/kg LOQ: 0.359 mg/kg	95 mg/kg	3814 mg/kg	1170 mg/kg (AM)	50th: 424 mg/kg;	1529 mg/kg (ASD)
Bi et al. 2015 HERO ID: 3019857 <i>OQD:</i> High	Dover, Delaware, US Scenario: Dust from indoor floors of gyms in Dover, Delaware. (n = 3; DF = 1.0; Sampling Period: Mar., 2013)	LOD: 0.108 mg/kg LOQ: 0.359 mg/kg	37 mg/kg	297 mg/kg	164 mg/kg (AM)	50th: 158 mg/kg;	130 mg/kg (ASD)
Bi et al. 2015 HERO ID: 3019857 <i>OQD:</i> High	Dover, Delaware, US Scenario: Dust from indoor floors of offices in Dover, Delaware. (n = 7; DF = 1.0; Sampling Period: Mar., 2013)	LOD: 0.108 mg/kg LOQ: 0.359 mg/kg	93 mg/kg	5224 mg/kg	1262 mg/kg (AM)	50th: 500 mg/kg;	1812 mg/kg (ASD)
Bi et al. 2015 HERO ID: 3019857 <i>OQD:</i> High	Dover, Delaware, US Scenario: Dust from indoor floors of commercial stores in Dover, Delaware. (n = 4; DF = 1.0; Sampling Period: Mar., 2013)	LOD: 0.108 mg/kg LOQ: 0.359 mg/kg	15 mg/kg	2118 mg/kg	555 mg/kg (AM)	50th: 44 mg/kg;	1042 mg/kg (ASD)

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Bi et al. 2015 HERO ID: 3019857 OQD: High	Dover, Delaware, US Scenario: Dust from indoor floors of daycare centers in Dover, Delaware. (n = 5; DF = 1.0; Sampling Period: Mar., 2013)	LOD: 0.108 mg/kg LOQ: 0.359 mg/kg	29 mg/kg	1134 mg/kg	359 mg/kg (AM)	50th: 167 mg/kg; 95th: 455 mg/kg (ASD)	
Kishi et al. 2018 HERO ID: 4728476 OQD: High	Sapporo, JP Scenario: Dust from multiple surfaces in homes (n = 128; DF = 0.852; Sampling Period: Oct., 2009 - Nov., 2010)	LOD: 1.0 µg/m³ LOQ: Not Reported	NR	267 µg/m³	NR	25th: 1.76 µg/m³; 50th: 3.9 µg/m³; 75th: 10.5 µg/m³;	NR
Kishi et al. 2018 HERO ID: 4728476 OQD: High	Sapporo, JP Scenario: Dust from floors in homes (n = 128; DF = 0.68; Sampling Period: Oct., 2009 - Nov., 2010)	LOD: 1.0 µg/m³ LOQ: Not Reported	NR	139 µg/m³	NR	25th: <LOD; 50th: 2.0 µg/m³; 75th: 5.4 µg/m³;	NR
Ait Bamai et al. 2018 HERO ID: 4829235 OQD: Medium	Hokaido, JP Scenario: Dust from living room floor surfaces (n = 296; DF = 0.952; Sampling Period: Mar., 2013)	LOD: Not Reported LOQ: 0.15 µg/g	<LOQ	134.69 µg/g	NR	25th: 0.38 µg/g; 50th: 1.31 µg/g; 75th: 3.73 µg/g;	NR
Bi et al. 2018 HERO ID: 5043341 OQD: High	Central Texas, US Scenario: HVAC filter dust from homes in central Texas (n = 91; DF = 0.81; Sampling Period: Jun., 2014 - Feb., 2015)	LOD: 0.90 µg/g LOQ: Not Reported	<LOD	2440 µg/g	80.8 µg/g (AM)	50th: 23.1 µg/g;	270 µg/g (ASD)
Bi et al. 2018 HERO ID: 5043341 OQD: High	Central Texas, US Scenario: Settled dust from homes in central Texas (n = 92; DF = 0.8; Sampling Period: Jun., 2014 - Feb., 2015)	LOD: 0.90 µg/g LOQ: Not Reported	<LOD	2380 µg/g	128 µg/g (AM)	50th: 20.1 µg/g;	383 µg/g (ASD)
Kweon et al. 2018 HERO ID: 5043550 OQD: High	Seoul; Kyung-gi Province, KR Scenario: Dust from residential homes (n = 42; DF = 0.74; Sampling Period: 2017)	LOD: 0.5 µg/g LOQ: Not Reported	<LOD	444.4 µg/g	52.1 µg/g (AM)	50th: 12.8 µg/g;	NR
Giovanoulis et al. 2019 HERO ID: 5412073 OQD: High	Stockholm, SE Scenario: Dust from 20 preschools (n = 20; DF = 0.9; Sampling Period: Jan., 2018 - Feb., 2018)	LOD: 0.02 µg/g LOQ: Not Reported	NR	NR	NR	50th: 6.4 µg/g; 95th: 38.6 µg/g;	NR
Luongo et al. 2016 HERO ID: 5469670 OQD: Medium	Stockholm, SE Scenario: House dust from 62 apartments (n = 62; DF = 1.0; Sampling Period: 2008)	LOD: 0.05 µg/g LOQ: Not Reported	3.4 µg/g	397 µg/g	NR	25th: 9.28 µg/g; 50th: 16 µg/g; 75th: 37 µg/g;	NR
Dodson et al. 2017 HERO ID: 5755270 OQD: High	Boston, MA, US Scenario: Surface wipes from green, low-income housing, POST-occupancy (n = 27; DF = 0.89; Sampling Period: Jul., 2013 - Jan., 2014)	LOD: 1 µg/ft² LOQ: 1.0 µg/ft²	ND	52 µg/ft²	6.4 µg/ft² (GM)	50th: 6.4 µg/ft²; 95th: 44 µg/ft²;	NR
Dodson et al. 2017 HERO ID: 5755270 OQD: High	Boston, MA, US Scenario: Surface wipes from green, low-income housing, PRE-occupancy (n = 10; DF = 0.3; Sampling Period: Jun., 2013 - Jul., 2013)	LOD: 1 µg/ft² LOQ: 1.0 µg/ft²	ND	2 µg/ft²	ND	50th: ND; 95th: 1.7 µg/ft²;	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Shin et al. 2019 HERO ID: 6968217 OQD: Medium	Northern California, US Scenario: Living room dust from 38 homes (n = 38; DF = 1.0; Sampling Period: May, 2015 - Aug., 2016)	LOD: 50 ng/g LOQ: Not Reported	626 ng/g	NR	NR	25th: 4489 ng/g; 50th: 9181 ng/g; 75th: 60223 ng/g; 95th: 134764 ng/g;	1.31 ng/g (CV)

Butyl benzyl phthalate

Monitoring

Groundwater

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

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Shi et al. 2012 HERO ID: 1249969 OQD: High	Xuzhou, Yangtze River Delta, China, CN Scenario: Source groundwater for Xuzhou (n = 3; DF = 1; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	1.3 ng/L (AM)	NR	0.3 ng/L (ASD)
Westinghouse Savannah River Company et al. 1997 HERO ID: 1740826 OQD: Medium	South Carolina, US Scenario: Groundwater monitoring wells in a landfill (n = 16; DF = 0; Sampling Period: 1995 - 1996)	LOD: 1 µg/L LOQ: Not Reported	NR	NR	<LOD	NR	NR
Liu et al. 2016 HERO ID: 3350971 OQD: Medium	Eastern China, CN Scenario: Groundwater within a chemical industrial park (n = 9; DF = 0; Sampling Period: 2016)	LOD: 0.001 µg/L LOQ: Not Reported	NR	NR	ND	NR	NR
Heck et al. 1992 HERO ID: 5438509 OQD: Medium	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: 5.0 µg/L	NR	NR	<LOQ	NR	NR
Heck et al. 1992 HERO ID: 5438509 OQD: Medium	Reno County, Kansas, US Scenario: Groundwater from monitoring wells near Reno County Landfill (n = 8; DF = 0; Sampling Period: Aug., 1990)	LOD: Not Reported LOQ: 5.0 µg/L	NR	NR	<LOQ	NR	NR
Bigsby et al. 1989 HERO ID: 5449639 OQD: Medium	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 OQD: Medium	Near Junction City in northeast Kansas (Geary County), US Scenario: Groundwater downgradient of Geary county landfill (n = 6; DF = 0; Sampling Period: Oct., 1988 - Sept., 1988)	LOD: 0.5 µg/L LOQ: Not Reported	NR	NR	<LOD	NR	NR
Bono-Blay et al. 2012 HERO ID: 1333834 OQD: High	Andalucía; Aragón; Asturias—Cantabria; Castilla y León—Madrid; Catalunya; Castilla La Mancha; Valencia; Extremadura; Galicia; Balearic islands; Canary Islands; Basque country—La Rioja, ES Scenario: Groundwater from 40 springs and 91 boreholes distributed all over Spain (n = 131; DF = 0; Sampling Period: 2007 - 2008)	LOD: 0.19 µg/L LOQ: 0.525 µg/L	NR	NR	<LOQ	NR	NR

Table 7: Data Extraction Tables of Exposure Monitoring Studies for Human Biomonitoring

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Main et al. 2006 HERO ID: 673480‡ <i>OQD:</i> Medium <i>mBzP</i>	Rigshospitalet, Copenhagen, Denmark, DK Scenario: Breast milk from mothers in Denmark - mBzP (n = 65; DF = 1; Sampling Period: 1997 - 2001)	LOD: 0.05 µg/L LOQ: Not Reported	0.2 µg/L	14 µg/L	NR	50th: 0.9 µg/L;	NR
Main et al. 2006 HERO ID: 673480‡ <i>OQD:</i> Medium <i>mBzP</i>	Turku, Finland, FI Scenario: Breast milk from mothers in Finland - mBzP (n = 65; DF = 1; Sampling Period: 1997 - 2001)	LOD: 0.05 µg/L LOQ: Not Reported	0.4 µg/L	26 µg/L	NR	50th: 1.3 µg/L;	NR
Latini et al. 2009 HERO ID: 673525‡ <i>OQD:</i> Medium <i>MBzP</i>	Brindisi and Tricase areas of Southern Italy, IT Scenario: Breastmilk of 62 healthy Italian mothers - MBzP (n = 62; DF = 0.44; Sampling Period: Mar., 2006 - Sept., 2006)	LOD: 0.3 mg/L LOQ: Not Reported	NR	4.3 µg/L	NR	50th: <LOD; 95th: 2.54 µg/L;	NR
Adibi et al. 2003 HERO ID: 674904‡ <i>OQD:</i> Medium <i>mBzP</i>	New York City, NY USA, US Scenario: Urine samples from pregnant New York subjects (n = 25; DF = 1; Sampling Period: Jul., 2000)	LOD: Not Reported LOQ: Not Reported	1.80 µg/g	449 µg/g	40.5 µg/g (GM)	50th: 4.6 µg/g;	98.4 µg/g (ASD)
Sathyannarayana et al. 2008 HERO ID: 676348‡ <i>OQD:</i> Medium <i>MBzP</i>	Los Angeles, California (Harbor-UCLA and Cedars-Sinai), Minneapolis, Minnesota (University of Minnesota Health Center), and Columbia, Missouri (University Physicians), US Scenario: Unadjusted urine samples from infants with measured exposure to baby care products - MBzP (n = 163; DF = 0.94; Sampling Period: Sept., 1999 - Aug., 2002)	LOD: 0.95 - 1.07 µg/L LOQ: Not Reported	NR	<LOD	<LOD	25th: <LOD; 50th: <LOD; 75th: <LOD;	<LOD
Lin et al. 2011 HERO ID: 699479‡ <i>OQD:</i> Medium <i>MBzP</i>	Central Taiwan, TW Scenario: Urine of pregnant women in Central Taiwan - unadjusted, MBzP (n = 100; DF = 0.64; Sampling Period: Dec., 2001 - Nov., 2002)	LOD: 0.25 µg/L LOQ: Not Reported	<LOD	55 µg/L	0.96 µg/L (GM)	50th: 1.23 µg/L;	NR
Lin et al. 2011 HERO ID: 699479‡ <i>OQD:</i> Medium <i>MBzP</i>	Central Taiwan, TW Scenario: Urine of children (5-6y) from Central Taiwan - unadjusted, MBzP (n = 59; DF = 0.93; Sampling Period: 2006 - 2007)	LOD: 0.25 µg/L LOQ: Not Reported	<LOD	42.85 µg/L	3.61 µg/L (GM)	50th: 3.66 µg/L;	NR
Lin et al. 2011 HERO ID: 699479‡ <i>OQD:</i> Medium <i>MBzP</i>	Central Taiwan, TW Scenario: Urine of children (2-3y) from Central Taiwan - unadjusted, MBzP (n = 30; DF = 0.90; Sampling Period: 2003 - 2004)	LOD: 0.25 µg/L LOQ: Not Reported	<LOD	69.43 µg/L	3.4 µg/L (GM)	50th: 3.86 µg/L;	NR
Lin et al. 2011 HERO ID: 699479‡ <i>OQD:</i> Medium <i>MBzP</i>	Central Taiwan, TW Scenario: Breastmilk of pregnant women from Central Taiwan - MBzP (n = 30; DF = 0.10; Sampling Period: Dec., 2001 - Nov., 2002)	LOD: 0.25 µg/L LOQ: Not Reported	<LOD	0.70 µg/L	1.10 µg/L (GM)	50th: <LOD;	NR

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Butyl benzyl phthalate

Monitoring

Human Biomonitoring

Table 7 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Lin et al. 2011 HERO ID: 699479‡ <i>OQD:</i> Medium <i>MBzP</i>	Central Taiwan, TW Scenario: Cord blood of pregnant women from Central Taiwan - MBzP (n = 30; DF = 0.10; Sampling Period: Dec., 2001 - Nov., 2002)	LOD: 0.25 µg/L LOQ: Not Reported	<LOD	0.70 µg/L	0.27 µg/L (GM)	50th: <LOD;	NR
Fromme et al. 2011 HERO ID: 787934 <i>OQD:</i> Medium	Bavaria, Southern Germany, DE Scenario: Breastmilk from 78 healthy Bavarian mothers (n = 78; DF = 0; Sampling Period: 2007 - 2008)	LOD: Not Reported LOQ: 5.0 ng/g	NR	NR	<LOD	NR	NR
Hauser et al. 2004 HERO ID: 788014‡ <i>OQD:</i> High <i>MBzP</i>	Boston, MA, US Scenario: Metabolite levels in single spot urine sample from 369 men - unadjusted, MBzP (n = 369; DF = >0.90; Sampling Period: 2004)	LOD: 0.47 µg/L LOQ: Not Reported	NR	NR	5.6 µg/L (GM)	10th: 1.1 µg/L; 25th: 2.4 µg/L; 50th: 6.0 µg/L; 75th: 13.7 µg/L; 90th: 25.3 µg/L; 95th: 34.7 µg/L;	NR
Hauser et al. 2004 HERO ID: 788014‡ <i>OQD:</i> High <i>MBzP</i>	Boston, MA, US Scenario: Metabolite levels in single spot urine sample from 369 men - Specific-gravity adjusted, MBzP (n = 369; DF = >0.90; Sampling Period: 2004)	LOD: 0.47 µg/L LOQ: Not Reported	NR	NR	6.6 µg/L (GM)	10th: 1.8 µg/L; 25th: 3.8 µg/L; 50th: 7.2 µg/L; 75th: 14.0 µg/L; 90th: 22.8 µg/L; 95th: 36.2 µg/L;	NR
Schlumpf et al. 2010 HERO ID: 1249442‡ <i>OQD:</i> Medium <i>MBzP</i>	Basel, CH Scenario: Human milk from individuals living in Switzerland (n = 20; DF = 0; Sampling Period: Aug., 2006 - Oct., 2006)	LOD: 0.5-1.0 ng/mL LOQ: Not Reported	NR	NR	<LOD	NR	NR
Schlumpf et al. 2010 HERO ID: 1249442‡ <i>OQD:</i> Medium <i>MBzP</i>	Basel, Switzerland, CH Scenario: Breast milk from mothers in summer to late fall (sunscreen and cosmetic usage reported) - MBzP (n = 20; DF = 0; Sampling Period: Aug., 2004 - Nov., 2006)	LOD: 0.5-1.0 µg/L LOQ: Not Reported	NR	NR	ND	NR	NR
Serrano et al. 2014 HERO ID: 2345950‡ <i>OQD:</i> High <i>BzBP</i>	Seattle, WA; Atlanta, GA, US Scenario: MBzP in pregnant women within TIDES cohort (n = 656; DF = 0.87; Sampling Period: 2010 - 2012)	LOD: 0.3 ng/mL LOQ: Not Reported	3.94 ng/mL	4.94 ng/mL	4.28 ng/mL (GM)	NR	NR
Watkins et al. 2014 HERO ID: 2347098‡ <i>OQD:</i> Medium <i>MBzP</i>	Cincinnati, OH, US Scenario: Unadjusted urinary measures from 1yo children - MBzP (n = 281; DF = 0.997; Sampling Period: Mar., 2003 - Jan., 2006)	LOD: 0.3 µg/L LOQ: Not Reported	NR	NR	NR	25th: 5.0 µg/L; 50th: 10.5 µg/L; 75th: 24.2 µg/L;	NR
Watkins et al. 2014 HERO ID: 2347098‡ <i>OQD:</i> Medium <i>MBzP</i>	Cincinnati, OH, US Scenario: Unadjusted urinary measures from 2yo children - MBzP (n = 235; DF = 0.997; Sampling Period: Mar., 2003 - Jan., 2006)	LOD: 0.3 µg/L LOQ: Not Reported	NR	NR	NR	25th: 5.0 µg/L; 50th: 12.4 µg/L; 75th: 27.0 µg/L;	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Watkins et al. 2014 HERO ID: 2347098 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Cincinnati, OH, US Scenario: Unadjusted urinary measures from 3yo children - MBzP (n = 237; DF = 0.997; Sampling Period: Mar., 2003 - Jan., 2006)	LOD: 0.3 µg/L LOQ: Not Reported	NR	NR	NR	25th: 5.5 µg/L; 50th: 14.9 µg/L; 75th: 38.2 µg/L;	NR
Watkins et al. 2014 HERO ID: 2347098 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Cincinnati, OH, US Scenario: Unadjusted urinary measures from 4yo children - MBzP (n = 172; DF = 0.997; Sampling Period: Mar., 2003 - Jan., 2006)	LOD: 0.3 µg/L LOQ: Not Reported	NR	NR	NR	25th: 5.8 µg/L; 50th: 12.8 µg/L; 75th: 28.7 µg/L;	NR
Watkins et al. 2014 HERO ID: 2347098 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Cincinnati, OH, US Scenario: Unadjusted urinary measures from 5yo children - MBzP (n = 203; DF = 0.997; Sampling Period: Mar., 2003 - Jan., 2006)	LOD: 0.3 µg/L LOQ: Not Reported	NR	NR	NR	25th: 4.6 µg/L; 50th: 9.7 µg/L; 75th: 24.0 µg/L;	NR
Watkins et al. 2014 HERO ID: 2347098 [‡] <i>OQD:</i> Medium <i>MnBP</i>	Cincinnati, OH, US Scenario: Unadjusted urinary measures from 4yo children - MnBP (n = 172; DF = 0.992; Sampling Period: Mar., 2003 - Jan., 2006)	LOD: 0.4 µg/L LOQ: Not Reported	NR	NR	NR	25th: 11.1 µg/L; 50th: 22.3 µg/L; 75th: 42.6 µg/L;	NR
Watkins et al. 2014 HERO ID: 2347098 [‡] <i>OQD:</i> Medium <i>MnBP</i>	Cincinnati, OH, US Scenario: Unadjusted urinary measures from 5yo children - MnBP (n = 203; DF = 0.992; Sampling Period: Mar., 2003 - Jan., 2006)	LOD: 0.4 µg/L LOQ: Not Reported	NR	NR	NR	25th: 9.0 µg/L; 50th: 16.1 µg/L; 75th: 31.8 µg/L;	NR
Pollack et al. 2014 HERO ID: 2718036 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Salt Lake City, UT; San Francisco, CA, US Scenario: Urine samples from women with fibroids - MBzP (n = 99; DF = 0.99; Sampling Period: 2007 - 2009)	LOD: Not Reported LOQ: 0.2 ng/mL	NR	NR	7.1 µg/g (GM)	L95thCI (AM): 6.0 µg/g; U95thCI (AM): 8.6 µg/g;	NR
Pollack et al. 2014 HERO ID: 2718036 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Salt Lake City, UT; San Francisco, CA, US Scenario: Urine samples from women with no fibroids - MBzP (n = 374; DF = 0.99; Sampling Period: 2007 - 2009)	LOD: Not Reported LOQ: 0.2 ng/mL	NR	NR	7.6 µg/g (GM)	L95thCI (AM): 6.9 µg/g; U95thCI (AM): 8.3 µg/g;	NR
Vagi et al. 2014 HERO ID: 2718073 [‡] <i>OQD:</i> High <i>mBzP</i>	Los Angeles, CA, US Scenario: Urinary concentrations of PCOS case-patients - mBzP (n = 52; DF = >0.5; Sampling Period: Mar., 2007 - May, 2008)	LOD: 0.3 µg/L LOQ: Not Reported	NR	NR	7.5 µg/g (GM)	NR	NR
Vagi et al. 2014 HERO ID: 2718073 [‡] <i>OQD:</i> High <i>mBzP</i>	Los Angeles, CA, US Scenario: Urinary concentrations of PCOS control-patients - mBzP (n = 50; DF = >0.5; Sampling Period: Mar., 2007 - May, 2008)	LOD: 0.3 µg/L LOQ: Not Reported	NR	NR	11.7 µg/g (GM)	NR	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Fisher et al. 2015 HERO ID: 2718085 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Ottawa, Canada, CA Scenario: Urine T1a (n = 80; DF = 0.978; Sampling Period: Nov., 2009 - Dec., 2011)	LOD: 0.2 µg/L LOQ: Not Reported	NR	2132.00 µg/L	9.85 (GM)	5th: 0.92 µg/L; 25th: 3.58 µg/L; 50th: 9.30 µg/L; 75th: 25.62 µg/L; 95th: 139.13 µg/L;	NR
Fisher et al. 2015 HERO ID: 2718085 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Ottawa, Canada, CA Scenario: Urine T1b (n = 80; DF = 0.992; Sampling Period: Nov., 2009 - Dec., 2011)	LOD: 0.2 µg/L LOQ: Not Reported	NR	1430.00 µg/L	7.66 (GM)	5th: 1.00 µg/L; 25th: 2.80 µg/L; 50th: 7.10 µg/L; 75th: 19.00 µg/L; 95th: 69.15 µg/L;	NR
Fisher et al. 2015 HERO ID: 2718085 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Ottawa, Canada, CA Scenario: Urine T2 (n = 80; DF = 1; Sampling Period: Nov., 2009 - Dec., 2011)	LOD: 0.2 µg/L LOQ: Not Reported	NR	131.00 µg/L	8.80 (GM)	5th: 0.86 µg/L; 25th: 3.10 µg/L; 50th: 8.75 µg/L; 75th: 19.00 µg/L; 95th: 82.24 µg/L;	NR
Fisher et al. 2015 HERO ID: 2718085 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Ottawa, Canada, CA Scenario: Urine T3 (n = 80; DF = 0.986; Sampling Period: Nov., 2009 - Dec., 2011)	LOD: 0.2 µg/L LOQ: Not Reported	NR	384.30 µg/L	10.70 (GM)	5th: 1.07 µg/L; 25th: 5.40 µg/L; 50th: 10.00 µg/L; 75th: 24.00 µg/L; 95th: 151.57 µg/L;	NR
Fisher et al. 2015 HERO ID: 2718085 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Ottawa, Canada, CA Scenario: Urine T5 (n = 80; DF = 0.984; Sampling Period: Nov., 2009 - Dec., 2011)	LOD: 0.2 µg/L LOQ: Not Reported	NR	164.49 µg/L	11.45 (GM)	5th: 1.00 µg/L; 25th: 4.80 µg/L; 50th: 13.09 µg/L; 75th: 32.00 µg/L; 95th: 79.03 µg/L;	NR
Bae et al. 2015 HERO ID: 2816865 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Michigan; Texas, US Scenario: Urinary concentrations of mothers with boy infant - MBzP (n = 213; DF = 0.96; Sampling Period: 2005 - 2009)	LOD: 0.2 - 1.0 ng/mL LOQ: Not Reported	NR	NR	2.90 ng/mL (GM)	2.5th: 2.15 ng/mL; 97.5th: 3.90 ng/mL;	NR
Bae et al. 2015 HERO ID: 2816865 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Michigan; Texas, US Scenario: Urinary concentrations of mothers with girl infant - MBzP (n = 213; DF = 0.96; Sampling Period: 2005 - 2009)	LOD: 0.2 - 1.0 ng/mL LOQ: Not Reported	NR	NR	2.91 ng/mL (GM)	2.5th: 2.22 ng/mL; 97.5th: 3.82 ng/mL;	NR
Bae et al. 2015 HERO ID: 2816865 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Michigan; Texas, US Scenario: Urinary concentrations of fathers with boy infant - MBzP (n = 212; DF = 0.96; Sampling Period: 2005 - 2009)	LOD: 0.2 - 1.0 ng/mL LOQ: Not Reported	NR	NR	3.12 ng/mL (GM)	2.5th: 2.36 ng/mL; 97.5th: 4.13 ng/mL;	NR
Bae et al. 2015 HERO ID: 2816865 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Michigan; Texas, US Scenario: Urinary concentrations of fathers with girl infant - MBzP (n = 212; DF = 0.96; Sampling Period: 2005 - 2009)	LOD: 0.2 - 1.0 ng/mL LOQ: Not Reported	NR	NR	3.80 ng/mL (GM)	2.5th: 2.97 ng/mL; 97.5th: 4.85 ng/mL;	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Huen et al. 2016 HERO ID: 3230402 [‡] <i>OQD:</i> High <i>MBzP</i>	Salinas Valley, California, US Scenario: Urinary measures of mothers at 13 weeks gestation - MBzP (n = 350; DF = 0.983; Sampling Period: 1999 - 2000)	LOD: 0.3 µg/L LOQ: Not Reported	0.3 µg/g µg/g	133.0	NR	25th: 3.3 µg/g; 50th: 6.4 µg/g; 75th: 12.4 µg/g;	NR
Huen et al. 2016 HERO ID: 3230402 [‡] <i>OQD:</i> High <i>MBzP</i>	Salinas Valley, California, US Scenario: Urinary measures of mothers at 26 weeks gestation - MBzP (n = 339; DF = 0.983; Sampling Period: 1999 - 2000)	LOD: 0.3 µg/L LOQ: Not Reported	0 µg/g µg/g	168.6	NR	25th: 4.4 µg/g; 50th: 7.6 µg/g; 75th: 13.9 µg/g;	NR
Ferguson et al. 2016 HERO ID: 3350218 [‡] <i>OQD:</i> High <i>MBzP</i>	Boston, MA, US Scenario: Urine from pregnant women in Boston, 10 weeks gestation - MBzP (n = 1924; DF = 1; Sampling Period: 2006 - 2008)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	25th: 3.36 µg/L; 50th: 6.22 µg/L; 75th: 13.6 µg/L;	NR
Ferguson et al. 2016 HERO ID: 3350218 [‡] <i>OQD:</i> High <i>MBzP</i>	Boston, MA, US Scenario: Urine from pregnant women in Boston, 18 weeks gestation - MBzP (n = 1924; DF = 1; Sampling Period: 2006 - 2008)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	25th: 3.62 µg/L; 50th: 6.29 µg/L; 75th: 12.8 µg/L;	NR
Ferguson et al. 2016 HERO ID: 3350218 [‡] <i>OQD:</i> High <i>MBzP</i>	Boston, MA, US Scenario: Urine from pregnant women in Boston, 26 weeks gestation - MBzP (n = 1924; DF = 1; Sampling Period: 2006 - 2008)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	25th: 3.61 µg/L; 50th: 6.19 µg/L; 75th: 12.0 µg/L;	NR
Ferguson et al. 2016 HERO ID: 3350218 [‡] <i>OQD:</i> High <i>MBzP</i>	Boston, MA, US Scenario: Urine from pregnant women in Boston, 35 weeks gestation - MBzP (n = 1924; DF = 1; Sampling Period: 2006 - 2008)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	25th: 3.70 µg/L; 50th: 6.37 µg/L; 75th: 11.9 µg/L;	NR
Rahbar et al. 2017 HERO ID: 4728376 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Alabama, Florida, or Mississippi, US Scenario: Urinary measures from children with Autism - MBzP (n = 24; DF = 0.97; Sampling Period: Jul., 2015 - Sept., 2016)	LOD: 0.98-2.08 ng/mL LOQ: Not Reported	3.20 µg/g	96.83 µg/g	19.01 µg/g (AM)	NR	2.38 µg/g (ASD)
Rahbar et al. 2017 HERO ID: 4728376 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Alabama, Florida, or Mississippi, US Scenario: Urinary measures from typically developed children - MBzP (n = 8; DF = 0.97; Sampling Period: Jul., 2015 - Sept., 2016)	LOD: 0.98-2.08 ng/mL LOQ: Not Reported	1.51 µg/g	70.58 µg/g	12.55 µg/g (AM)	NR	3.07 µg/g (ASD)
Polinski et al. 2018 HERO ID: 4728411 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Colorado, US Scenario: Creatinine adjusted urine measures from Colorado women <24 weeks gestation - MBzP (n = 446; DF = 0.97; Sampling Period: 2009 - 2014)	LOD: 0.3 ng/mL LOQ: Not Reported	NR	NR	5.5 ng/mL (GM)	5th: 0.9 ng/mL; 95th: 40.1 ng/mL;	NR
Polinski et al. 2018 HERO ID: 4728411 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Colorado, US Scenario: Unadjusted urine measures from Colorado women <24 weeks gestation - MBzP (n = 446; DF = 0.97; Sampling Period: 2009 - 2014)	LOD: 0.3 ng/mL LOQ: Not Reported	NR	NR	4.8 ng/mL (GM)	5th: 0.4 ng/mL; 95th: 53.2 ng/mL;	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Huffman et al. 2018 HERO ID: 4728509 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Springfield, MA, US Scenario: Urinary metabolite measures in men undergoing fertility treatment - MBzP (n = 99; DF = 1; Sampling Period: 2014 - 2017)	LOD: 0.1 - 0.9 ng/mL LOQ: Not Reported	NR	NR	4.62 ng/mL (GM)	L95thCI (AM): 3.75 ng/mL; 25th: 2.32 ng/mL; 50th: 4.56 ng/mL; 75th: 9.57 ng/mL; 95th: 23.4 ng/mL; U95thCI (AM): 5.70 ng/mL;	NR
Hartle et al. 2018 HERO ID: 4728555 [‡] <i>OQD:</i> High <i>BzBP</i>	Throughout CA, US Scenario: Human milk from milk bank donors (n = 21; DF = 1; Sampling Period: 2015)	LOD: 0.1 ng/mL LOQ: Not Reported	1.59 ng/g	83.20 ng/g	25.08 ng/g (AM)	10th: 3.62 ng/g; 25th: 5.89 ng/g; 50th: 21.86 ng/g; 75th: 38.79 ng/g; 90th: 52.35 ng/g;	22.68 ng/g (ASD)
Bedrosian et al. 2018 HERO ID: 4728685 [‡] <i>OQD:</i> Medium <i>MBZP</i>	Boston, MA, US Scenario: Pregnant Women Urine Samples from Boston - MBZP (n = 134; DF = 1; Sampling Period: 2006 - 2008)	LOD: Not Reported LOQ: Not Reported	NR	255 ng/mL	4.75 ng/mL (GM)	25th: 1.93 ng/mL; 50th: 4.36 ng/mL; 75th: 12.4 ng/mL; 95th: 42.7 ng/mL;	NR
Malits et al. 2018 HERO ID: 4829246 [‡] <i>OQD:</i> Medium <i>MBZP</i>	USA, US Scenario: Urinary concentrations in children with chronic kidney disease (mild-moderate) - MBzP (n = 538; DF = >0.75; Sampling Period: 2005 - 2014)	LOD: 0.02-0.5 ng/mL LOQ: Not Reported	NR	NR	7.68 ng/mL (GM)	L95thCI (AM): 7.00 ng/mL; 25th: 3.99 ng/mL; 50th: 7.22 ng/mL; 75th: 15.51 ng/mL; U95thCI (AM): 8.41 ng/mL;	NR
Balalian et al. 2019 HERO ID: 5039985 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Northern Manhattan, New York City; South Bronx, New York City, US Scenario: Urine measures of third trimester pregnant adult African American or Dominican women who were/are at least 1-year residents of northern Manhattan or South Bronx - MBzP (n = 209; DF = 1; Sampling Period: 1999 - 2006)	LOD: 0.2 ng/mL LOQ: Not Reported	<LOD	390.2 ng/mL	12.3 ng/mL (GM)	25th: 5 ng/mL; 50th: 13.2 ng/mL; 75th: 26.7 ng/mL;	NR
Balalian et al. 2019 HERO ID: 5039985 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Northern Manhattan, New York City; South Bronx, New York City, US Scenario: Urine from 3-year-old children with African-American or Dominican maternal descent - MBzP (n = 166; DF = 1; Sampling Period: 2002 - 2008)	LOD: 0.216 ng/mL LOQ: Not Reported	0.29 ng/mL	253 ng/mL	23.1 ng/mL (GM)	25th: 8.5 ng/mL; 50th: 22.59 ng/mL; 75th: 67.45 ng/mL;	NR
Balalian et al. 2019 HERO ID: 5039985 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Northern Manhattan, New York City; South Bronx, New York City, US Scenario: Urine from 5-year-old children with African-American or Dominican maternal descent - MBzP (n = 199; DF = 1; Sampling Period: 2004 - 2009)	LOD: 0.216 ng/mL LOQ: Not Reported	0.29 ng/mL	2253 ng/mL	22 ng/mL (GM)	25th: 8.5 ng/mL; 50th: 25.6 ng/mL; 75th: 67.4 ng/mL;	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Balalian et al. 2019 HERO ID: 5039985 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Northern Manhattan, New York City; South Bronx, New York City, US Scenario: Urine from 7-year-old children with African-American or Dominican maternal descent - MBzP (n = 156; DF = 1; Sampling Period: 2005 - 2009)	LOD: 0.2 ng/mL LOQ: Not Reported	NR	NR	23.2 ng/mL (GM)	25th: 8.96 ng/mL; 50th: 22.7 ng/mL;	NR
Reeves et al. 2019 HERO ID: 5043403 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Nationwide, US Scenario: Urine from women (50-79 years) in Women's Health Initiative bone mineral density study - MBzP (n = 1257; DF = 0.95-1; Sampling Period: Oct., 1993 - Dec., 1998)	LOD: 0.2-0.6 ng/L LOQ: Not Reported	NR	NR	11.2 ng/mL (GM)	5th: 1.8 ng/mL; 25th: 5.9 ng/mL; 75th: 22.0 ng/mL; 95th: 58.5 ng/mL;	NR
Shaffer et al. 2019 HERO ID: 5043458 [‡] <i>OQD:</i> Medium <i>MBZP</i>	CA; MN; NY; WA, US Scenario: Urine from first trimester pregnancy, <13 weeks - MBZP (n = 668; DF = 0.95; Sampling Period: 2010 - 2012)	LOD: 0.2-2.0 ng/mL LOQ: Not Reported	NR	NR	4.3 µg/L (GM)	NR	2.9 µg/L (GSD)
Shaffer et al. 2019 HERO ID: 5043458 [‡] <i>OQD:</i> Medium <i>MBZP</i>	CA; MN; NY; WA, US Scenario: Urine from third trimester pregnancy - MBZP (n = 679; DF = 0.95; Sampling Period: 2010 - 2012)	LOD: 0.2-2.0 ng/mL LOQ: Not Reported	NR	NR	4.8 µg/L (GM)	NR	3.2 µg/L (GSD)
Shin et al. 2019 HERO ID: 5043463 [‡] <i>OQD:</i> Medium <i>MBzP</i>	State of California, US Scenario: Urine from pregnant women who previously delivered a child with ASD in California - MBzP (n = 178; DF = 0.99; Sampling Period: Jan., 2007 - Feb., 2014)	LOD: 0.3 µg/L LOQ: Not Reported	NR	120.8 µg/L	6.4 µg/L (GM)	5th: 1.2 µg/L; 25th: 3.4 µg/L; 50th: 6.5 µg/L; 75th: 12.1 µg/L; 95th: 37.7 µg/L;	NR
van't Erve et al. 2019 HERO ID: 5043603 [‡] <i>OQD:</i> Medium <i>MBzP</i>	University of California, San Francisco; University of Rochester Medical Center; University of Minnesota; and University of Washington/Seattle Children's Hospital, US Scenario: Urine samples from pregnant women - MBzP (n = 756; DF = 0.992; Sampling Period: Jan., 2010 - Dec., 2012)	LOD: 0.3 ng/mL LOQ: Not Reported	NR	NR	4.8 ng/mL (GM)	25th: 2.2 ng/mL; 50th: 4.82 ng/mL; 75th: 11.1 ng/mL; 95th: 36.3 ng/mL;	3.3 ng/mL (GSD)
Hammel et al. 2019 HERO ID: 5532853 [‡] <i>OQD:</i> High <i>MBzP</i>	Durham, North Carolina, US Scenario: Urine from 3-6 year old children - MBzP (n = 180; DF = 1; Sampling Period: Sept., 2014 - Apr., 2016)	LOD: 0.30 ng/mL LOQ: Not Reported	1.3 ng/mL	NR	NR	50th: 17 ng/mL; 95th: 361 ng/mL;	NR
Hammel et al. 2019 HERO ID: 5532853 <i>OQD:</i> High	Durham, North Carolina, US Scenario: Hand wipe from 3-6 year old children (n = 202; DF = 0.97; Sampling Period: Sept., 2014 - Apr., 2016)	LOD: 12 ng/sample LOQ: Not Reported	NR	NR	NR	50th: 138 ng/sample; 95th: 1110 ng/sample;	NR
Huang et al. 2014 HERO ID: 5755647 <i>OQD:</i> High	Chongqing, China, CN Scenario: Cord blood measures from pregnant women who delivered at Southwest Hospital in Chongqing (n = 207; DF = 0.4589; Sampling Period: Oct., 2011 - Sept., 2012)	LOD: 0.15 µg/L LOQ: Not Reported	NR	NR	22.55 µg/L (AM)	5th: ND; 25th: ND; 50th: ND; 75th: 0.99 µg/L; 95th: 89.87 µg/L;	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Buckley et al. 2012 HERO ID: 5772514 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Multiple locations, US Scenario: Creatinine adjusted urine from women 22-24 weeks pregnant - MBzP (n = 50; DF = 0.9; Sampling Period: Jun., 2002 - Sept., 2003)	LOD: 0.18 ng/mL LOQ: Not Reported	<LOD	63.3 µg/g	11.8 µg/g (AM)	50th: 7.7 µg/g;	12.4 µg/g (ASD)
Ferguson et al. 2019 HERO ID: 6813951 [‡] <i>OQD:</i> High <i>MBzP</i>	San Francisco, CA; Rochester, NY; Minneapolis, MN; Seattle, WA, US Scenario: Urine from pregnant women in their 1st trimester - MBzP (n = 754; DF = 0.87; Sampling Period: Aug., 2010 - Aug., 2012)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	25th: 2.05 µg/L; 50th: 4.00 µg/L; 75th: 8.56 µg/L;	NR
Ferguson et al. 2019 HERO ID: 6813951 [‡] <i>OQD:</i> High <i>MBzP</i>	San Francisco, CA; Rochester, NY; Minneapolis, MN; Seattle, WA, US Scenario: Urine from pregnant women in their 2nd trimester - MBzP (n = 169; DF = 0.953; Sampling Period: Aug., 2010 - Aug., 2012)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	25th: 1.81 µg/L; 50th: 3.29 µg/L; 75th: 18.34 µg/L;	NR
Ferguson et al. 2019 HERO ID: 6813951 [‡] <i>OQD:</i> High <i>MBzP</i>	San Francisco, CA; Rochester, NY; Minneapolis, MN; Seattle, WA, US Scenario: Urine from pregnant women in their 3rd trimester - MBzP (n = 738; DF = 0.953; Sampling Period: Aug., 2010 - Aug., 2012)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	25th: 2.22 µg/L; 50th: 4.82 µg/L; 75th: 11.5 µg/L;	NR
Kim et al. 2020 HERO ID: 6815879 [‡] <i>OQD:</i> High <i>MBzP</i>	Seoul metropolitan; Chungcheong, Honam; Yeongnam region, KR Scenario: Breastmilk samples from primipara mothers receiving lactation coaching - MBzP (n = 12; DF = 0.05; Sampling Period: Jul., 2018 - Sept., 2018)	LOD: 0.08 µg/L LOQ: Not Reported	NR	NR	0.06 µg/L (GM)	5th: <LOD; 25th: <LOD; 50th: <LOD; 75th: <LOD; 95th: 0.10 µg/L;	1.37 µg/L (GSD)
Araki et al. 2020 HERO ID: 6957526 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Sapporo, JP Scenario: Urine from elementary school children in urban area (n = 128; DF = 1; Sampling Period: 2009 - 2010)	LOD: Not Reported LOQ: Not Reported	3.68 nmol/g	2620 nmol/g	NR	25th: 23.5 nmol/g; 50th: 52.8 nmol/g; 75th: 106 nmol/g;	NR
Becker et al. 2009 HERO ID: 551773 [‡] <i>OQD:</i> High <i>MBzP</i>	DE Scenario: Phthalate metabolites in urine of German children aged 3 to 14 years (n = 599; DF = 1; Sampling Period: May, 2003 - May, 2006)	LOD: Not Reported LOQ: 0.25 µg/L	NR	468 µg/L	17.5 µg/L (GM)	50th: 18.1 µg/L; 90th: 53.4 µg/L; 95th: 76.2 µg/L;	NR
Becker et al. 2009 HERO ID: 551773 [‡] <i>OQD:</i> High <i>MBzP</i>	DE Scenario: Phthalate metabolites in urine of German children aged 3 to 5 years (n = 137; DF = NR; Sampling Period: May, 2003 - May, 2006)	LOD: Not Reported LOQ: 0.25 µg/L	NR	468 µg/L	18.8 µg/L (GM)	50th: 19.7 µg/L; 90th: 57.8 µg/L; 95th: 73.2 µg/L;	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Becker et al. 2009 HERO ID: 551773 [‡] <i>OQD:</i> High <i>MBzP</i>	DE Scenario: Phthalate metabolites in urine of German children aged 6 to 8 years (n = 145; DF = NR; Sampling Period: May, 2003 - May, 2006)	LOD: Not Reported LOQ: 0.25 µg/L	NR	167 µg/L	16.4 µg/L (GM)	50th: 18.2 µg/L; 90th: 55.1 µg/L; 95th: 76.2 µg/L;	NR
Becker et al. 2009 HERO ID: 551773 [‡] <i>OQD:</i> High <i>MBzP</i>	DE Scenario: Phthalate metabolites in urine of German children aged 9 to 11 years (n = 149; DF = NR; Sampling Period: May, 2003 - May, 2006)	LOD: Not Reported LOQ: 0.25 µg/L	NR	154 µg/L	17.2 µg/L (GM)	50th: 16.0 µg/L; 90th: 49.2 µg/L; 95th: 85.0 µg/L;	NR
Becker et al. 2009 HERO ID: 551773 [‡] <i>OQD:</i> High <i>MBzP</i>	DE Scenario: Phthalate metabolites in urine of German children aged 12 to 14 years (n = 168; DF = NR; Sampling Period: May, 2003 - May, 2006)	LOD: Not Reported LOQ: 0.25 µg/L	NR	299 µg/L	17.7 µg/L (GM)	50th: 18.4 µg/L; 90th: 51.0 µg/L; 95th: 80.5 µg/L;	NR
Hogberg et al. 2008 HERO ID: 673465 [‡] <i>OQD:</i> High <i>BBzP, mBzP</i>	Lund, SE Scenario: Breast milk samples when babies were 14-20 days of age (n = 42; DF = 0.98; Sampling Period: 2007)	LOD: 0.12 ng/mL LOQ: Not Reported	<LOD	4.4 ng/mL	<LOD	50th: <LOD; 75th: <LOD;	<LOD
Hogberg et al. 2008 HERO ID: 673465 <i>OQD:</i> High	Lund, SE Scenario: Blood samples from mothers 1 week after milk sampling (n = 36; DF = 0.81; Sampling Period: 2007)	LOD: 0.10 ng/mL LOQ: Not Reported	<LOD	1.4 ng/mL	0.29 ng/mL (AM)	50th: 0.25 ng/mL; 75th: 0.36 ng/mL;	0.27 ng/mL (ASD)
Hogberg et al. 2008 HERO ID: 673465 [‡] <i>OQD:</i> High <i>mBzP</i>	Lund, SE Scenario: Urine samples from mothers 1 week after milk sampling (n = 38; DF = 1.0; Sampling Period: 2007)	LOD: 1.0 ng/mL LOQ: Not Reported	4.5 µg/g	63 µg/g	20 µg/g (AM)	50th: 17 µg/g; 75th: 27 µg/g;	13 µg/g (ASD)
Huang et al. 2009 HERO ID: 673468 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Tainan, Taiwan, TW Scenario: 1st trimester maternal urinary samples from women carrying female fetuses prior to amniocentesis (n = 31; DF = 0.63; Sampling Period: 2005 - 2006)	LOD: 1.4 ng/mL LOQ: Not Reported	<LOD	845.0 ng/mL	NR	10th: <LOD; 50th: 3.0 ng/mL; 90th: 16.8 ng/mL;	NR
Huang et al. 2009 HERO ID: 673468 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Tainan, Taiwan, TW Scenario: 1st trimester amniotic fluid samples of male fetuses from women prior to amniocentesis (n = 33; DF = <0.5; Sampling Period: 2005 - 2006)	LOD: 1.4 ng/mL LOQ: Not Reported	<LOD	104.0 ng/mL	NR	10th: <LOD; 50th: <LOD; 90th: 87.9 ng/mL;	NR
Huang et al. 2009 HERO ID: 673468 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Tainan, Taiwan, TW Scenario: 1st trimester maternal urinary samples from women carrying male fetuses prior to amniocentesis (n = 33; DF = 0.63; Sampling Period: 2005 - 2006)	LOD: 1.4 ng/mL LOQ: Not Reported	<LOD	98.5 ng/mL	NR	10th: <LOD; 50th: 2.5 ng/mL; 90th: 13.9 ng/mL;	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Huang et al. 2009 HERO ID: 673468‡ <i>OQD:</i> Medium <i>MBzP</i>	Tainan, Taiwan, TW Scenario: 1st trimester amniotic fluid samples of female fetuses from women prior to amniocentesis (n = 31; DF = <0.5; Sampling Period: 2005 - 2006)	LOD: 1.4 ng/mL LOQ: Not Reported	<LOD	233.0 ng/mL	NR	10th: <LOD; 50th: <LOD; 90th: 84.1 ng/mL;	NR
Lomenick et al. 2010 HERO ID: 673478‡ <i>OQD:</i> Medium <i>MBzP</i>	US Scenario: Urine from subjects with CPP (n = 28; DF = NR; Sampling Period: 2005 - 2008)	LOD: Not Reported LOQ: Not Reported	NR	NR	40.2 ng/mL (AM)	NR	8.4 ng/mL (SE)
Lomenick et al. 2010 HERO ID: 673478‡ <i>OQD:</i> Medium <i>MBzP</i>	US Scenario: Urine from subjects without CPP (n = 28; DF = NR; Sampling Period: 2005 - 2008)	LOD: Not Reported LOQ: Not Reported	NR	NR	42.8 ng/mL (AM)	NR	8.8 ng/mL (SE)
Fromme et al. 2007 HERO ID: 679517‡ <i>OQD:</i> Medium <i>MBzP</i>	Munich, DE Scenario: Phthalate metabolites in urine (ug/l) of female adults near Munich, Germany (n = 399; DF = 1; Sampling Period: Apr., 2005 - Oct., 2005)	LOD: 0.25 µg/L LOQ: 0.5 µg/L	2.6 µg/L	149.6 µg/L	14.2 µg/L (AM)	10th: 2.9 µg/L; 50th: 8.0 µg/L; 90th: 26.0 µg/L; 95th: 30.3 µg/L;	NR
Fromme et al. 2007 HERO ID: 679517‡ <i>OQD:</i> Medium <i>MBzP</i>	Munich, DE Scenario: Phthalate metabolites in urine (ug/l) of male adults near Munich, Germany (n = 399; DF = 1; Sampling Period: Apr., 2005 - Oct., 2005)	LOD: 0.25 µg/L LOQ: 0.5 µg/L	3.0 µg/L	38.4 µg/L	9.7 µg/L (AM)	10th: 3.9 µg/L; 50th: 6.4 µg/L; 90th: 16.4 µg/L; 95th: 20.6 µg/L;	NR
Fromme et al. 2007 HERO ID: 679517‡ <i>OQD:</i> Medium <i>MBzP</i>	Munich, DE Scenario: Phthalate metabolites in urine (ug/g creatinine) of female adults near Munich, Germany (n = 399; DF = 1; Sampling Period: Apr., 2005 - Oct., 2005)	LOD: 0.25 µg/L LOQ: 0.5 µg/L	3.1 µg/g	83.9 µg/g	11.6 µg/g (AM)	10th: 3.8 µg/g; 50th: 7.6 µg/g; 90th: 20.8 µg/g; 95th: 21.2 µg/g;	NR
Fromme et al. 2007 HERO ID: 679517‡ <i>OQD:</i> Medium <i>MBzP</i>	Munich, DE Scenario: Phthalate metabolites in urine (ug/g creatinine) of male adults near Munich, Germany (n = 399; DF = 1; Sampling Period: Apr., 2005 - Oct., 2005)	LOD: 0.25 µg/L LOQ: 0.5 µg/L	2.8 µg/g	20.9 µg/g	8.0 µg/g (AM)	10th: 3.5 µg/g; 50th: 5.1 µg/g; 90th: 14.7 µg/g; 95th: 16.5 µg/g;	NR
Suzuki et al. 2010 HERO ID: 697317‡ <i>OQD:</i> Medium <i>MnBP, MBzP</i>	Tokyo, JP Scenario: Creatinine-uncorrected urinary concentrations of phthalate ester metabolites in Japanese pregnant women (n = 149; DF = 1; Sampling Period: 2005 - 2008)	LOD: 0.157 ng/mL LOQ: Not Reported	<LOD	992 ng/mL	4.27 ng/mL (GM)	25th: 1.74 ng/mL; 50th: 3.46 ng/mL; 75th: 11.2 ng/mL;	NR
Suzuki et al. 2010 HERO ID: 697317‡ <i>OQD:</i> Medium <i>MnBP, MBzP</i>	Tokyo, JP Scenario: Creatinine-corrected urinary concentrations of phthalate ester metabolites in Japanese pregnant women (n = 149; DF = 1; Sampling Period: 2005 - 2008)	LOD: 0.157 ng/mL LOQ: Not Reported	0.058 ng/mL	553 ng/mL	5.62 ng/mL (GM)	25th: 3.10 ng/mL; 50th: 4.70 ng/mL; 75th: 9.83 ng/mL;	NR
Peck et al. 2010 HERO ID: 697726‡ <i>OQD:</i> High <i>MnBP, MBzP</i>	Green Bay, Wisconsin, US Scenario: Urinary concentrations from Hmong couples in Green Bay, Wisconsin (n = 45; DF = 1; Sampling Period: Sept., 1999 - Nov., 2005)	LOD: 0.4 µg/L LOQ: Not Reported	2.8 µg/g	90.1 µg/g	20.9 µg/g (GM)	25th: 15.6 µg/g; 50th: 23.0 µg/g; 75th: 38.1 µg/g; 95th: 65.4 µg/g;	2.2 µg/g (ASD)

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Frederiksen et al. 2011 HERO ID: 787933 [‡] <i>OQD:</i> High <i>MBzP</i>	Copenhagen, DK Scenario: First morning urine samples (n = 129; DF = 0.992; Sampling Period: Nov., 2007)	LOD: 1.26 ng/mL LOQ: Not Reported	<LOD	401 ng/mL	NR	10th: 9.4 ng/mL; 25th: 17 ng/mL; 50th: 32 ng/mL; 75th: 62 ng/mL; 90th: 129 ng/mL; 95th: 192 ng/mL;	NR
Frederiksen et al. 2011 HERO ID: 787933 [‡] <i>OQD:</i> High <i>MBzP</i>	Copenhagen, DK Scenario: Second morning urine samples (n = 129; DF = 0.977; Sampling Period: Nov., 2007)	LOD: 1.26 ng/mL LOQ: Not Reported	<LOD	642 ng/mL	NR	10th: 6.6 ng/mL; 25th: 15 ng/mL; 50th: 29 ng/mL; 75th: 56 ng/mL; 90th: 118 ng/mL; 95th: 160 ng/mL;	NR
Frederiksen et al. 2011 HERO ID: 787933 [‡] <i>OQD:</i> High <i>MBzP</i>	Copenhagen, DK Scenario: 24 hour urine samples (n = 129; DF = 0.961; Sampling Period: Nov., 2007)	LOD: 1.26 ng/mL LOQ: Not Reported	<LOD	315 ng/mL	NR	10th: 3.4 ng/mL; 25th: 8 ng/mL; 50th: 17 ng/mL; 75th: 30 ng/mL; 90th: 73 ng/mL; 95th: 101 ng/mL;	NR
Guo et al. 2011 HERO ID: 787935 [‡] <i>OQD:</i> High <i>MBzP, MBP</i>	Kuala Lumpur, MY Scenario: Urine samples from Malaysia (n = 29; DF = NR; Sampling Period: May, 2010 - Jul., 2010)	LOD: Not Reported LOQ: 0.1 ng/mL	NR	NR	29.8 ng/mL (AM); 14.5 ng/mL (GM)	10th: 4.5 ng/mL; 50th: 15.1 ng/mL; 90th: 43.6 ng/mL;	NR
Guo et al. 2011 HERO ID: 787935 [‡] <i>OQD:</i> High <i>MBzP, MBP</i>	Guangzhou; Shanghai; Qiqihar, CN Scenario: Urine samples from China (n = 40; DF = NR; Sampling Period: May, 2010 - Jul., 2010)	LOD: Not Reported LOQ: 0.1 ng/mL	NR	NR	111 ng/mL (AM); 53.6 ng/mL (GM)	10th: 9.9 ng/mL; 50th: 69.5 ng/mL; 90th: 351 ng/mL;	NR
Guo et al. 2011 HERO ID: 787935 [‡] <i>OQD:</i> High <i>MBzP, MBP</i>	Ehime; Kumamoto, JP Scenario: Urine samples from Japan (n = 35; DF = NR; Sampling Period: May, 2010 - Jul., 2010)	LOD: Not Reported LOQ: 0.1 ng/mL	NR	NR	16.5 ng/mL (AM); 13.1 ng/mL (GM)	10th: 5.4 ng/mL; 50th: 11.5 ng/mL; 90th: 38.0 ng/mL;	NR
Guo et al. 2011 HERO ID: 787935 [‡] <i>OQD:</i> High <i>MBzP, MBP</i>	Seoul; Busan; Yeosu, KR Scenario: Urine samples from Korea (n = 60; DF = NR; Sampling Period: 2006 - 2007)	LOD: Not Reported LOQ: 0.1 ng/mL	NR	NR	22.7 ng/mL (AM); 17.0 ng/mL (GM)	10th: 6.5 ng/mL; 50th: 19.8 ng/mL; 90th: 47.7 ng/mL;	NR
Guo et al. 2011 HERO ID: 787935 [‡] <i>OQD:</i> High <i>MBP, MBzP</i>	Al-Asma; Al-Jahra governorates, KW Scenario: Urine samples from Kuwait (n = 46; DF = NR; Sampling Period: May, 2010 - Jul., 2010)	LOD: Not Reported LOQ: 0.1 ng/mL	NR	NR	5.3 ng/mL (AM); 3.2 ng/mL (GM)	10th: ND; 50th: 2.1 ng/mL; 90th: 15.6 ng/mL;	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Guo et al. 2011 HERO ID: 787935 [‡] <i>OQD:</i> High <i>MBzP</i>	Mettupalayam, IN Scenario: Urine samples from India (n = 22; DF = NR; Sampling Period: May, 2010 - Jul., 2010)	LOD: Not Reported LOQ: 0.1 ng/mL	NR	NR	0.7 ng/mL (AM); 1.4 ng/mL (GM)	10th: ND; 50th: ND; 90th: 3.1 ng/mL;	NR
Guo et al. 2011 HERO ID: 787935 [‡] <i>OQD:</i> High <i>MBzP</i>	Hanoi, VN Scenario: Urine samples from Vietnam (n = 30; DF = NR; Sampling Period: May, 2010 - Jul., 2010)	LOD: Not Reported LOQ: 0.1 ng/mL	NR	NR	1.1 ng/mL (AM); 1.2 ng/mL (GM)	10th: ND; 50th: ND; 90th: 0.9 ng/mL;	NR
Teitelbaum et al. 2012 HERO ID: 1249979 [‡] <i>OQD:</i> Medium <i>MBzP</i>	New York City, New York, US Scenario: Urine samples from girls within Growing Up Healthy cohort (n = 299; DF = 0.96, 0.04, 0.001; Sampling Period: 2004 - 2008)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	50th: 28.4 Other;	NR
Carlstedt et al. 2013 HERO ID: 1315309 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Varmland, SE Scenario: Urine samples from 2 or 6 month old randomly selected infants (n = 83; DF = 1; Sampling Period: 2012)	LOD: Not Reported LOQ: Not Reported				Interquartile range: 9.11 ng/mol	
Koch et al. 2013 HERO ID: 1464613 [‡] <i>OQD:</i> High <i>BBzP/MBzP</i>	Bochum, DE Scenario: 0-<24 hr urine samples from 5 adults (n = 5; DF = 0.98; Sampling Period: Nov., 2009)	LOD: 0.1 µg/L LOQ: 0.2 µg/L	NR	NR	2.7 µg/g (AM)	50th: 2.3 µg/g; 95th: 7.3 µg/g;	1.9 µg/g (ASD)
Koch et al. 2013 HERO ID: 1464613 [‡] <i>OQD:</i> High <i>BBzP/MBzP</i>	Bochum, DE Scenario: 24-<48 hr urine samples from 5 adults (n = 5; DF = 1; Sampling Period: Nov., 2009)	LOD: 0.1 µg/L LOQ: 0.2 µg/L	NR	NR	2.7 µg/g (AM)	50th: 1.9 µg/g; 95th: 6.2 µg/g;	1.8 µg/g (ASD)
Frederiksen et al. 2013 HERO ID: 1588874 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Gentofte and Viby Sj., DK Scenario: First morning urine void from mothers in Denmark (n = 145; DF = 0.92; Sampling Period: Sept., 2011 - Dec., 2011)	LOD: 1.14 ng/mL LOQ: Not Reported	<LOD	38 ng/mL	6.1 ng/mL (GM)	5th: 20 ng/mL; 25th: 2 ng/mL; 50th: 4 ng/mL; 75th: 7 ng/mL; 95th: 22 ng/mL;	NR
Frederiksen et al. 2013 HERO ID: 1588874 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Gentofte and Viby Sj., DK Scenario: First morning urine void from children in Denmark (n = 143; DF = 0.97; Sampling Period: Sept., 2011 - Dec., 2011)	LOD: 1.14 ng/mL LOQ: Not Reported	<LOD	104 ng/mL	11 ng/mL (GM)	5th: 1.6 ng/mL; 25th: 4.3 ng/mL; 50th: 7.0 ng/mL; 75th: 12 ng/mL; 95th: 31 ng/mL;	NR
Enke et al. 2013 HERO ID: 1588876 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Jena, DE Scenario: Urine from pregnant women close to birth; mother-child pairs (n = 9; DF = 1; Sampling Period: 2010)	LOD: Not Reported LOQ: 0.2 µg/L	0.4 µg/L	66.3 µg/L	NR	50th: 4 µg/L;	NR

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Table 7 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Enke et al. 2013 HERO ID: 1588876 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Jena, DE Scenario: Urine from pregnant women (n = 47; DF = 1; Sampling Period: 2008)	LOD: Not Reported LOQ: 0.2 µg/L	0.38 µg/L	28.9 µg/L	NR	50th: 5.2 µg/L;	NR
Enke et al. 2013 HERO ID: 1588876 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Jena, DE Scenario: Newborns first urine from mother-child pairs (n = 9; DF = NR; Sampling Period: 2010)	LOD: Not Reported LOQ: 0.2 µg/L	<LOQ	59 µg/L	NR	50th: 2.2 µg/L;	NR
Enke et al. 2013 HERO ID: 1588876 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Jena, DE Scenario: Newborns urine day 2 to 5 (n = 20; DF = 1; Sampling Period: 2008)	LOD: Not Reported LOQ: 0.2 µg/L	0.99 µg/L	382.1 µg/L	NR	50th: 12.7 µg/L;	NR
Sathyaranayana et al. 2013 HERO ID: 1597638 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Seattle, WA, US Scenario: Urine sample during pre-intervention period in arm 1 (n = 21; DF = 1.00; Sampling Period: 2013)	LOD: 0.95 - 1.07 µg/L LOQ: Not Reported	NR	NR	6.9 µg/L (GM)	NR	NR
Sathyaranayana et al. 2013 HERO ID: 1597638 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Seattle, WA, US Scenario: Urine sample during intervention period in arm 1 (n = 21; DF = 1.00; Sampling Period: 2013)	LOD: 0.95 - 1.07 µg/L LOQ: Not Reported	NR	NR	11.5 µg/L (GM)	NR	NR
Sathyaranayana et al. 2013 HERO ID: 1597638 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Seattle, WA, US Scenario: Urine sample during post-intervention period in arm 1 (n = 21; DF = 1.00; Sampling Period: 2013)	LOD: 0.95 - 1.07 µg/L LOQ: Not Reported	NR	NR	10.4 µg/L (GM)	NR	NR
Sathyaranayana et al. 2013 HERO ID: 1597638 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Seattle, WA, US Scenario: Urine sample during pre-intervention period in arm 2 (n = 19; DF = 1.00; Sampling Period: 2013)	LOD: 0.95 - 1.07 µg/L LOQ: Not Reported	NR	NR	8.6 µg/L (GM)	NR	NR
Sathyaranayana et al. 2013 HERO ID: 1597638 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Seattle, WA, US Scenario: Urine sample during intervention period in arm 2 (n = 19; DF = 1.00; Sampling Period: 2013)	LOD: 0.95 - 1.07 µg/L LOQ: Not Reported	NR	NR	10.4 µg/L (GM)	NR	NR
Sathyaranayana et al. 2013 HERO ID: 1597638 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Seattle, WA, US Scenario: Urine sample during post-intervention period in arm 2 (n = 19; DF = 1.00; Sampling Period: 2013)	LOD: 0.95 - 1.07 µg/L LOQ: Not Reported	NR	NR	10.8 µg/L (GM)	NR	NR
Cantonwine et al. 2014 HERO ID: 2215404 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Northern Puerto Rico, PR Scenario: Urinary phthalates from pregnant women in Puerto Rico (n = 373; DF = 0.984; Sampling Period: 2010 - Nov., 2012)	LOD: Not Reported LOQ: Not Reported	95% Confidence Interval, Lower Limit: 3.4 ng/mL ; 95% Confidence Interval, Upper Limit: 4.4 ng/mL				

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Table 7 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Fromme et al. 2013 HERO ID: 2215411 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Bavaria, Berlin, and North Rhine-Westfalia, DE Scenario: Urine samples from German daycare centers (n = 663; DF = 0.82; Sampling Period: Nov., 2011 - May, 2012)	LOD: Not Reported LOQ: Not Reported				Sex difference p-value: 0.003 µg/L	
Ferguson et al. 2014 HERO ID: 2345949 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Boston, MA, US Scenario: Urine samples of pregnant women at median 9.71 weeks of gestation (n = 479; DF = 0.99; Sampling Period: 2006 - 2008)	LOD: Not Reported LOQ: Not Reported	NR	NR	6.95 µg/L (GM)	NR	3.19 µg/L (GSD)
Ferguson et al. 2014 HERO ID: 2345949 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Boston, MA, US Scenario: Urine samples of pregnant women at median 17.9 weeks of gestation (n = 422; DF = 0.99; Sampling Period: 2006 - 2008)	LOD: Not Reported LOQ: Not Reported	NR	NR	6.95 µg/L (GM)	NR	3.05 µg/L (GSD)
Ferguson et al. 2014 HERO ID: 2345949 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Boston, MA, US Scenario: Urine samples of pregnant women at median 26.0 weeks of gestation (n = 412; DF = 0.99; Sampling Period: 2006 - 2008)	LOD: Not Reported LOQ: Not Reported	NR	NR	6.89 µg/L (GM)	NR	2.95 µg/L (GSD)
Ferguson et al. 2014 HERO ID: 2345949 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Boston, MA, US Scenario: Urine samples of pregnant women at median 35.1 weeks of gestation (n = 380; DF = 0.99; Sampling Period: 2006 - 2008)	LOD: Not Reported LOQ: Not Reported	NR	NR	7.86 µg/L (GM)	NR	2.97 µg/L (GSD)
Geens et al. 2014 HERO ID: 2519090 [‡] <i>OQD:</i> Medium <i>MBzP</i>	5 Flemish Provinces, BE Scenario: Flemish adolescents urine samples (n = 206; DF = 1; Sampling Period: May, 2008 - May, 2009)	LOD: Not Reported LOQ: 0.149 µg/L	3.68 µg/g	755.1 µg/g	24.33 µg/g	25th: 13.35 µg/g; 50th: 22.45 µg/g; 75th: 45.67 µg/g; 90th: 74.55 µg/g; 95th: 97.01 µg/g;	NR
Robledo et al. 2015 HERO ID: 2816868 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Oklahoma, US Scenario: Urine spot samples (n = 72; DF = 0.98; Sampling Period: Feb., 2008 - Jun., 2008)	LOD: Not Reported LOQ: Not Reported			33rd percentile: 10.01 µg/L ; 66th percentile: 30.31 µg/L		
Chen et al. 2015 HERO ID: 2816869 [‡] <i>OQD:</i> Medium <i>MBzP</i>	TW Scenario: Pre-Intervention Spot Urine (n = 30; DF = NR; Sampling Period: Summer, 2010)	LOD: 0.14 ng/mL LOQ: Not Reported	1.50 µg/g	58.2 µg/g	NR	50th: 6.62 µg/g;	NR
Chen et al. 2015 HERO ID: 2816869 [‡] <i>OQD:</i> Medium <i>MBzP</i>	TW Scenario: Post-Intervention Spot Urine (n = 30; DF = NR; Sampling Period: Summer, 2010)	LOD: 0.14 ng/mL LOQ: Not Reported	1.25 µg/g	68.1 µg/g	NR	50th: 5.66 µg/g;	NR
Dewalque et al. 2015 HERO ID: 3045602 [‡] <i>OQD:</i> Medium <i>MBzP</i>	BE Scenario: Spot Urine Samples Collected Over 120 Days (n = 351; DF = 0.997; Sampling Period: Feb., 2013 - Jul., 2013)	LOD: Not Reported LOQ: Not Reported	<LOD	14.0 µg/g	2.1 µg/g (GM)	50th: 2.0 µg/g; 95th: 6.3 µg/g;	NR

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Table 7 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Asimakopoulos et al. 2016 HERO ID: 3070934 [‡] <i>OQD:</i> High <i>MBzP</i>	Jeddah, SA Scenario: Urine from healthy general population in Jeddah, Saudi Arabia (n = 130; DF = 0.662; Sampling Period: May, 2014 - Jun., 2014)	LOD: 0.49 ng/mL LOQ: 1.63 ng/mL	0 ng/mL	0.48 ng/mL	3.28 ng/mL (AM)	NR	NR
Giovanoulis et al. 2016 HERO ID: 3455194 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Oslo, NO Scenario: Urine samples from exposure to PSE's and DINCH (n = 61; DF = 0.1; Sampling Period: winter, 2013 - winter, 2014)	LOD: Not Reported LOQ: 6.5e-4 µg/L	NR	NR	3.5 µg/g (GM)	25th: 1.8 µg/g; 50th: 3 µg/g; 95th: 15.5 µg/g;	NR
Giovanoulis et al. 2016 HERO ID: 3455194 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Oslo, NO Scenario: Nail samples from exposure to PSE's and DINCH (n = 59; DF = 0.92; Sampling Period: winter, 2013 - winter, 2014)	LOD: Not Reported LOQ: 2.9 ng/g	NR	NR	2.6 ng/g (GM)	25th: 1.5 ng/g; 50th: 1.7 ng/g; 95th: 41.5 ng/g;	NR
Nassan et al. 2019 HERO ID: 5041439 [‡] <i>OQD:</i> High <i>MnBP</i>	Boston, MA, US Scenario: Urine samples of women undergoing fertility treatment - MnBP (n = 840; DF = 0.94; Sampling Period: 2004 - 2017)	LOD: 0.40–0.60 µg/L LOQ: Not Reported	NR	NR	7.03 µg/L (GM)	25th: 2.60 µg/L; 75th: 20.7 µg/L;	NR
Nassan et al. 2019 HERO ID: 5041439 [‡] <i>OQD:</i> High <i>MBzP</i>	Boston, MA, US Scenario: Urine samples of women undergoing fertility treatment - MBzP (n = 840; DF = 0.88; Sampling Period: 2004 - 2017)	LOD: 0.20–0.30 µg/L LOQ: Not Reported	NR	NR	2.23 µg/L (GM)	25th: 0.70 µg/L; 75th: 6.90 µg/L;	NR
Nassan et al. 2019 HERO ID: 5041439 [‡] <i>OQD:</i> High <i>MnBP</i>	Boston, MA, US Scenario: Urine samples of men undergoing fertility treatment - MnBP (n = 840; DF = 0.97; Sampling Period: 2004 - 2017)	LOD: 0.40–0.60 µg/L LOQ: Not Reported	NR	NR	9.97 µg/L (GM)	25th: 4.75 µg/L; 75th: 24.1 µg/L;	NR
Nassan et al. 2019 HERO ID: 5041439 [‡] <i>OQD:</i> High <i>MBzP</i>	Boston, MA, US Scenario: Urine samples of men undergoing fertility treatment - MBzP (n = 840; DF = 0.94; Sampling Period: 2004 - 2017)	LOD: 0.20–0.30 µg/L LOQ: Not Reported	NR	NR	3.13 µg/L (GM)	25th: 1.26 µg/L; 75th: 8.21 µg/L;	NR

[‡] Data extraction results are for metabolite concentrations.

Table 8: Data Extraction Tables of Exposure Monitoring Studies for Indoor Air

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Rudel et al. 2001 HERO ID: 198234 OQD: High	Massachusetts, US Scenario: Indoor air from residential and office areas - BBP (n = 6; DF = 0.50; Sampling Period: 2001)	LOD: 1.6431 µg LOQ: Not Reported	0.01 µg/m³	0.172 µg/m³	0.072 µg/m³ (AM)	NR	NR
Rudel et al. 2001 HERO ID: 198234 OQD: High	Massachusetts, US Scenario: Indoor air from workplace areas - BBP (n = 1; DF = 0; Sampling Period: 2001)	LOD: 1.6431 µg LOQ: Not Reported	NR	NR	ND	NR	NR
Bergh et al. 2011 HERO ID: 788335 OQD: Medium	Stockholm, SE Scenario: Indoor air in 10 homes (n = 10; DF = NR; Sampling Period: 2010)	LOD: Not Reported LOQ: Not Reported	6.6 ng/m³	97 ng/m³	28 ng/m³ (AM)	50th: 21 ng/m³;	NR
Bergh et al. 2011 HERO ID: 788335 OQD: Medium	Stockholm, SE Scenario: Indoor air in 10 workplaces (n = 10; DF = NR; Sampling Period: 2010)	LOD: Not Reported LOQ: Not Reported	8.6 ng/m³	30 ng/m³	16 ng/m³ (AM)	50th: 15 ng/m³;	NR
Bergh et al. 2011 HERO ID: 788335 OQD: Medium	Stockholm, SE Scenario: Indoor air in 10 day cares (n = 10; DF = NR; Sampling Period: 2010)	LOD: Not Reported LOQ: Not Reported	9.1 ng/m³	33 ng/m³	19 ng/m³ (AM)	50th: 21 ng/m³;	NR
Otake et al. 2004 HERO ID: 789515 OQD: Medium	Tokyo, JP Scenario: Indoor air from 27 houses (n = 27; DF = NR; Sampling Period: Apr., 2000 - Dec., 2000)	LOD: 2.5-5 pg LOQ: Not Reported	<LOD	0.11 µg/m³	0.02 µg/m³ (AM)	50th: 0.01 µg/m³;	0.03 µg/m³ (ASD)
Yoshida et al. 2006 HERO ID: 1949033 OQD: Medium	Osaka, JP Scenario: Indoor air in 101 cars (n = 101; DF = 0.81; Sampling Period: Mar., 2004 - Oct., 2004)	LOD: Not Reported LOQ: Not Reported	0 µg/m³	0.02 µg/m³	NR	50th: 0.001 µg/m³;	NR
Kanazawa et al. 2010 HERO ID: 697390 OQD: Medium	Sapporo, JP Scenario: Living room air from residential detached houses (n = 39; DF = 0.256; Sampling Period: Oct., 2006 - Jan., 2006)	LOD: 2.9 ng/m³ LOQ: Not Reported	<LOD	26.6 ng/m³	NR	50th: <LOD;	NR
Bergh et al. 2011 HERO ID: 1249459 OQD: Medium	Stockholm, SE Scenario: Indoor air from 169 apartments (n = 169; DF = NR; Sampling Period: winter, 2006 - winter, 2007)	LOD: 0.33 ng/m³ LOQ: Not Reported	<1 ng/m³	300 ng/m³	21 ng/m³ (AM)	50th: 9 ng/m³;	NR
Blanchard et al. 2013 HERO ID: 1315297 OQD: High	Paris, FR Scenario: Office air (n = 6; DF = NR; Sampling Period: Jun., 2008 - Oct., 2008)	LOD: Not Reported LOQ: 5 pg/m³	NR	NR	1.353 ng/m³ (AM)	NR	0.305 ng/m³ (ASD)
Otake et al. 2001 HERO ID: 1598712 OQD: Medium	Tokyo, JP Scenario: Indoor air from 6 contemporary Japanese houses (n = 6; DF = 0.83; Sampling Period: Apr., 2000 - May, 2000)	LOD: 10 pg LOQ: 0.51 µg	POINT VALUE(S): [0.08 µg/m³; <0.0012 µg/m³; 0.10 µg/m³; 0.07 µg/m³; 0.01 µg/m³; 0.08 µg/m³]				

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Table 8 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Fromme et al. 2013 HERO ID: 2215411 OQD: Medium	Bavaria, Berlin, and North Rhine-Westfalia, DE Scenario: Indoor air sample from German daycare centers (n = 63; DF = 0.1; Sampling Period: Nov., 2011 - May, 2012)	LOD: 3 ng/m ³ LOQ: 10 ng/m ³	5 ng/m ³	215 ng/m ³	NR	NR	NR
Takeuchi et al. 2014 HERO ID: 2519043 OQD: Medium	Sapporo, Hokkaido, JP Scenario: Indoor air from bedrooms and living rooms of 6 homes (n = 12; DF = 0.91667; Sampling Period: Jul., 2012 - Aug., 2012)	LOD: Not Reported LOQ: 0.001 μg/m ³	<LOQ	0.072 μg/m ³	0.02 μg/m ³ (AM)	10th: 0.0041 μg/m ³ ; 25th: 0.00725 μg/m ³ ; 50th: 0.009 μg/m ³ ; 75th: 0.0345 μg/m ³ ; 90th: 0.0618 μg/m ³ ;	0.02 μg/m ³ (ASD)
Tran et al. 2015 HERO ID: 2816872 OQD: Medium	Albany, NY, US Scenario: Indoor air (particulate) in homes (n = 20; DF = 1; Sampling Period: Jan., 2014 - May, 2014)	LOD: 0.8 μg/g LOQ: 2.5 μg/g	0.11 ng/m ³	59.8 ng/m ³	6.26 ng/m ³ (AM)	50th: 1.19 ng/m ³ ;	NR
Tran et al. 2015 HERO ID: 2816872 OQD: Medium	Albany, NY, US Scenario: Indoor air (vapor) in homes (n = 20; DF = 1; Sampling Period: Jan., 2014 - May, 2014)	LOD: 0.06 ng/m ³ LOQ: 0.2 ng/m ³	0.20 ng/m ³	24.7 ng/m ³	6.22 ng/m ³ (AM)	50th: 2.99 ng/m ³ ;	NR
Tran et al. 2015 HERO ID: 2816872 OQD: Medium	Albany, NY, US Scenario: Indoor air (particulate) in offices (n = 7; DF = 1; Sampling Period: Jan., 2014 - May, 2014)	LOD: 0.8 μg/g LOQ: 2.5 μg/g	0.36 ng/m ³	1.95 ng/m ³	0.94 ng/m ³ (AM)	50th: 0.89 ng/m ³ ;	NR
Tran et al. 2015 HERO ID: 2816872 OQD: Medium	Albany, NY, US Scenario: Indoor air (vapor) in offices (n = 7; DF = 1; Sampling Period: Jan., 2014 - May, 2014)	LOD: 0.06 ng/m ³ LOQ: 0.2 ng/m ³	0.57 ng/m ³	17.4 ng/m ³	5.97 ng/m ³ (AM)	50th: 3.83 ng/m ³ ;	NR
Tran et al. 2015 HERO ID: 2816872 OQD: Medium	Albany, NY, US Scenario: Indoor air (particulate) in laboratories (n = 13; DF = 1; Sampling Period: Jan., 2014 - May, 2014)	LOD: 0.8 μg/g LOQ: 2.5 μg/g	0.11 ng/m ³	4.22 ng/m ³	1.40 ng/m ³ (AM)	50th: 0.99 ng/m ³ ;	NR
Tran et al. 2015 HERO ID: 2816872 OQD: Medium	Albany, NY, US Scenario: Indoor air (vapor) in laboratories (n = 13; DF = 1; Sampling Period: Jan., 2014 - May, 2014)	LOD: 0.06 ng/m ³ LOQ: 0.2 ng/m ³	1.03 ng/m ³	20.6 ng/m ³	5.81 ng/m ³ (AM)	50th: 3.15 ng/m ³ ;	NR
Tran et al. 2015 HERO ID: 2816872 OQD: Medium	Albany, NY, US Scenario: Indoor air (particulate) in schools (n = 6; DF = 1; Sampling Period: Jan., 2014 - May, 2014)	LOD: 0.8 μg/g LOQ: 2.5 μg/g	0.68 ng/m ³	8.35 ng/m ³	5.45 ng/m ³ (AM)	50th: 7.12 ng/m ³ ;	NR
Tran et al. 2015 HERO ID: 2816872 OQD: Medium	Albany, NY, US Scenario: Indoor air (vapor) in schools (n = 6; DF = 1; Sampling Period: Jan., 2014 - May, 2014)	LOD: 0.06 ng/m ³ LOQ: 0.2 ng/m ³	0.40 ng/m ³	15.9 ng/m ³	9.3 ng/m ³ (AM)	50th: 8.6 ng/m ³ ;	NR
Tran et al. 2015 HERO ID: 2816872 OQD: Medium	Albany, NY, US Scenario: Indoor air (particulate) in salons (n = 6; DF = 1; Sampling Period: Jan., 2014 - May, 2014)	LOD: 0.8 μg/g LOQ: 2.5 μg/g	0.27 ng/m ³	1.98 ng/m ³	0.88 ng/m ³ (AM)	50th: 0.78 ng/m ³ ;	NR
Tran et al. 2015 HERO ID: 2816872 OQD: Medium	Albany, NY, US Scenario: Indoor air (vapor) in salons (n = 6; DF = 1; Sampling Period: Jan., 2014 - May, 2014)	LOD: 0.06 ng/m ³ LOQ: 0.2 ng/m ³	0.94 ng/m ³	26.0 ng/m ³	10.9 ng/m ³ (AM)	50th: 10.7 ng/m ³ ;	NR

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Table 8 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Tran et al. 2015 HERO ID: 2816872 OQD: Medium	Albany, NY, US Scenario: Indoor air (particulate) in public places (n = 8; DF = 1; Sampling Period: Jan., 2014 - May, 2014)	LOD: 0.8 $\mu\text{g/g}$ LOQ: 2.5 $\mu\text{g/g}$	0.33 ng/m ³	3.08 ng/m ³	1.37 ng/m ³ (AM)	50th: 1.30 ng/m ³ ;	NR
Tran et al. 2015 HERO ID: 2816872 OQD: Medium	Albany, NY, US Scenario: Indoor air (vapor) in public places (n = 8; DF = 1; Sampling Period: Jan., 2014 - May, 2014)	LOD: 0.06 ng/m ³ LOQ: 0.2 ng/m ³	0.70 ng/m ³	17.2 ng/m ³	4.42 ng/m ³ (AM)	50th: 3.72 ng/m ³ ;	NR
Takeuchi et al. 2015 HERO ID: 3005686 OQD: Medium	11 prefectures, JP Scenario: Indoor air from 21 suburban living rooms (n = 21; DF = 0.05; Sampling Period: Oct., 2013 - Jan., 2014)	LOD: Not Reported LOQ: 0.003 $\mu\text{g/m}^3$	NR	0.022 $\mu\text{g/m}^3$	NR	50th: 0.022 $\mu\text{g/m}^3$;	NR
Saini et al. 2015 HERO ID: 3009392 OQD: High	Toronto, CA Scenario: Passive air from vinyl tile floors from of buildings at the University of Toronto (n = 1; DF = 1; Sampling Period: Summer, 2012 - Fall, 2013)	LOD: 0.06 Other LOQ: Not Reported	14 ng/m ³	20 ng/m ³	17 ng/m ³ (GM)	NR	2.4 ng/m ³ (ASD)
Raffy et al. 2016 HERO ID: 3229681 OQD: High	Ille-et-Vilaine, Brittany, FR Scenario: Indoor air from French classrooms (n = 56; DF = 1; Sampling Period: Fall, 2009 - Spring, 2010)	LOD: Not Reported LOQ: 1 ng/m ³	NR	NR	NR	5th: 3.7 ng/m ³ ; 50th: 19 ng/m ³ ; 95th: >50 ng/m ³ ;	NR
Raffy et al. 2016 HERO ID: 3229681 OQD: High	Ille-et-Vilaine, Brittany, FR Scenario: Vacuumed dust from French classrooms (n = 22; DF = 1; Sampling Period: Fall, 2009 - Spring, 2010)	LOD: Not Reported LOQ: 66 ng/g	NR	NR	NR	5th: 11400 ng/g; 50th: 105000 ng/g; 95th: 468000 ng/g;	NR
Raffy et al. 2016 HERO ID: 3229681 OQD: High	Ille-et-Vilaine, Brittany, FR Scenario: Wiped dust from French classrooms (n = 22; DF = 1; Sampling Period: Fall, 2009 - Spring, 2010)	LOD: Not Reported LOQ: 40 ng/g	NR	NR	NR	5th: 6750 ng/m ² ; 50th: 73600 ng/m ² ; 95th: 1940000 ng/m ² ;	NR
Laborie et al. 2016 HERO ID: 3230514 OQD: Medium	near Paris, FR Scenario: Indoor air (gaseous) from a day nursery (n = 3; DF = 1; Sampling Period: Summer, 2013)	LOD: 138 pg/m ³ LOQ: 460 pg/m ³	NR	NR	70.65 ng/m ³ (AM)	NR	54.24 ng/m ³ (ASD)
Laborie et al. 2016 HERO ID: 3230514 OQD: Medium	near Paris, FR Scenario: Indoor air (gaseous) from an apartment (n = 3; DF = 1; Sampling Period: Summer, 2013)	LOD: 138 pg/m ³ LOQ: 460 pg/m ³	NR	NR	16.16 ng/m ³ (AM)	NR	23.63 ng/m ³ (ASD)
Laborie et al. 2016 HERO ID: 3230514 OQD: Medium	near Paris, FR Scenario: Indoor air (particulate) from an office (n = 3; DF = 1; Sampling Period: Summer, 2013)	LOD: 92.7 pg/m ³ LOQ: 309 pg/m ³	NR	NR	9.628 ng/m ³ (AM)	NR	1.536 ng/m ³ (ASD)
Laborie et al. 2016 HERO ID: 3230514 OQD: Medium	near Paris, FR Scenario: Indoor air (particulate) from an apartment (n = 3; DF = 1; Sampling Period: Summer, 2013)	LOD: 92.7 pg/m ³ LOQ: 309 pg/m ³	NR	NR	2.080 ng/m ³ (AM)	NR	1.324 ng/m ³ (ASD)
Laborie et al. 2016 HERO ID: 3230514 OQD: Medium	near Paris, FR Scenario: Indoor air (gaseous) from an office (n = 3; DF = 1; Sampling Period: Summer, 2013)	LOD: 138 pg/m ³ LOQ: 460 pg/m ³	NR	NR	11.03 ng/m ³ (AM)	NR	3.93 ng/m ³ (ASD)

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Butyl benzyl phthalate

Monitoring

Indoor Air

Table 8 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Laborie et al. 2016 HERO ID: 3230514 OQD: Medium	near Paris, FR Scenario: Indoor air (particulate) from a house (n = 3; DF = 1; Sampling Period: Summer, 2013)	LOD: 92.7 pg/m ³ LOQ: 309 pg/m ³	NR	NR	2.063 ng/m ³ (AM)	NR	0.507 ng/m ³ (ASD)
Laborie et al. 2016 HERO ID: 3230514 OQD: Medium	near Paris, FR Scenario: Indoor air (gaseous) from a house (n = 3; DF = 1; Sampling Period: Summer, 2013)	LOD: 138 pg/m ³ LOQ: 460 pg/m ³	NR	NR	16.71 ng/m ³ (AM)	NR	17.66 ng/m ³ (ASD)
Laborie et al. 2016 HERO ID: 3230514 OQD: Medium	near Paris, FR Scenario: Indoor air (particulate) from a day nursery (n = 3; DF = 1; Sampling Period: Summer, 2013)	LOD: 92.7 pg/m ³ LOQ: 309 pg/m ³	NR	NR	110.0 ng/m ³ (AM)	NR	72.6 ng/m ³ (ASD)
Moreau-Guigon et al. 2016 HERO ID: 3470397 OQD: Medium	Paris, FR Scenario: Office air during non-heating season (n = 6; DF = NR; Sampling Period: Sept., 2011 - Nov., 2011)	LOD: Not Reported LOQ: 3.8-49.4 pg/m ³	NR	NR	0.7 ng/m ³ (AM)	NR	0.93 ng/m ³ (ASD)
Moreau-Guigon et al. 2016 HERO ID: 3470397 OQD: Medium	Paris, FR Scenario: Office air during heating season (n = 6; DF = NR; Sampling Period: Jan., 2012 - Mar., 2012)	LOD: Not Reported LOQ: 3.8-49.4 pg/m ³	NR	NR	2.2 ng/m ³ (AM)	NR	0.000 ng/m ³ (ASD)
Moreau-Guigon et al. 2016 HERO ID: 3470397 OQD: Medium	Paris, FR Scenario: Apartment air during non-heating season (n = 6; DF = NR; Sampling Period: Sept., 2011 - Nov., 2011)	LOD: Not Reported LOQ: 3.8-49.4 pg/m ³	NR	NR	8.6 ng/m ³ (AM)	NR	9.3 ng/m ³ (ASD)
Moreau-Guigon et al. 2016 HERO ID: 3470397 OQD: Medium	Paris, FR Scenario: Apartment air during heating season (n = 6; DF = NR; Sampling Period: Jan., 2012 - Mar., 2012)	LOD: Not Reported LOQ: 3.8-49.4 pg/m ³	NR	NR	0.63 ng/m ³ (AM)	NR	0.000 ng/m ³ (ASD)
Moreau-Guigon et al. 2016 HERO ID: 3470397 OQD: Medium	Paris, FR Scenario: Nursery air during non-heating season (n = 6; DF = NR; Sampling Period: Sept., 2011 - Nov., 2011)	LOD: Not Reported LOQ: 3.8-49.4 pg/m ³	NR	NR	50 ng/m ³ (AM)	NR	26 ng/m ³ (ASD)
Moreau-Guigon et al. 2016 HERO ID: 3470397 OQD: Medium	Paris, FR Scenario: Nursery air during heating season (n = 6; DF = NR; Sampling Period: Jan., 2012 - Mar., 2012)	LOD: Not Reported LOQ: 3.8-49.4 pg/m ³	NR	NR	88 ng/m ³ (AM)	NR	21 ng/m ³ (ASD)
Okeme et al. 2018 HERO ID: 4659643 OQD: Medium	Greater Toronto Area, Ottawa, CA Scenario: Air in homes from polyurethane foam sampling (n = 51; DF = 1; Sampling Period: Feb., 2015 - Aug., 2015)	LOD: 3 NR LOQ: 10 NR or NA	0.90 ng/m ³	69 ng/m ³	5.8 ng/m ³ (AM)	50th: 3 ng/m ³ ;	11 ng/m ³ (ASD)
Okeme et al. 2018 HERO ID: 4659643 OQD: Medium	Greater Toronto Area, Ottawa, CA Scenario: Air in homes from polydimethylsiloxane sampling (n = 51; DF = 1; Sampling Period: Feb., 2015 - Aug., 2015)	LOD: 3 NR LOQ: 10 NR or NA	0.02 ng/m ³	58 ng/m ³	3.6 ng/m ³ (AM)	50th: 1.4 ng/m ³ ;	9.9 ng/m ³ (ASD)
Okeme et al. 2018 HERO ID: 4659643 OQD: Medium	Toronto, Ontario, CA Scenario: Air from computer laboratory (n = 51; DF = 0.8; Sampling Period: May, 2016 - Jul., 2016)	LOD: 3 NR LOQ: 10 NR or NA	NR	NR	51 ng/m ³ (AM)	NR	9 % (CV)

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Butyl benzyl phthalate

Monitoring

Indoor Air

Table 8 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Dodson et al. 2019 HERO ID: 5432871 OQD: High	Greater Boston, MA, US Scenario: Indoor air from a variety of spaces. Active air sampling (n = 37; DF = 0.73; Sampling Period: Oct., 2013 - Jul., 2015)	LOD: Not Reported LOQ: 4.1 ng/m ³	NR	190 ng/m ³	NR	50th: 9.2 ng/m ³ ; 95th: 78 ng/m ³ ;	NR
Luongo et al. 2016 HERO ID: 5469670 OQD: Medium	Stockholm, SE Scenario: Indoor air from 62 apartments (n = 62; DF = 1.0; Sampling Period: 2008)	LOD: Not Reported LOQ: Not Reported	1.0 ng/m ³	134 ng/m ³	NR	25th: 5.9 ng/m ³ ; 50th: 9.2 ng/m ³ ; 75th: 32 ng/m ³ ;	NR
Dodson et al. 2017 HERO ID: 5755270 OQD: High	Boston, MA, US Scenario: Indoor air from green, low-income housing, PRE-occupancy (n = 10; DF = 1; Sampling Period: Jun., 2013 - Jul., 2013)	LOD: 2.3 ng/m ³ LOQ: 36 ng/m ³	<LOQ	57 ng/m ³	<LOQ	50th: <LOQ; 95th: 47 ng/m ³ ;	NR
Dodson et al. 2017 HERO ID: 5755270 OQD: High	Boston, MA, US Scenario: Indoor air from green, low-income housing, POST-occupancy (n = 25; DF = 0.96; Sampling Period: Jul., 2013 - Jan., 2014)	LOD: 2.3 ng/m ³ LOQ: 36 ng/m ³	<LOD	46 ng/m ³	<LOQ	50th: <LOQ; 95th: 44 ng/m ³ ;	NR

Butyl benzyl phthalate

Monitoring

Other

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

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Wilk et al. 2019 HERO ID: 5709835 OQD: Medium	Pomerania region and Gdynia, PL Scenario: Landfill leachate from a previous cell (PP-LLCs) (n = 8; DF = 0; Sampling Period: Jan., 2015 - Apr., 2016)	LOD: 0.3 µg/L LOQ: 1.0 µg/L	NR	NR	<LOD	NR	NR
Wilk et al. 2019 HERO ID: 5709835 OQD: Medium	Pomerania region and Gdynia, PL Scenario: Landfill leachate from a modern cell (MP-LLCs) (n = 9; DF = 0.11; Sampling Period: Jan., 2015 - Apr., 2016)	LOD: 0.3 µg/L LOQ: 1.0 µg/L	<LOD	1.7 µg/L	NR	NR	NR
Başaran et al. 2020 HERO ID: 6813710 OQD: Medium	Kocaeli Province, TR Scenario: Road dust in front of homes (n = 90; DF = 0.93; Sampling Period: Feb., 2016 - Apr., 2016)	LOD: Not Reported LOQ: 0.087 ng/g	ND	9.65 µg/g	1.02 µg/g (AM)	50th: 0.25 µg/g; (ASD)	1.82 µg/g
Llompart et al. 2013 HERO ID: 1597738 OQD: High	Northwestern Spain, ES Scenario: Rubber recycled tire tiles and puzzle pavers from a local store northwestern Spain. (n = 2; DF = 0.1; Sampling Period: 2012)	LOD: 16.0 ng/mL LOQ: Not Reported	21.9 µg/g	74.1 µg/g	48.0 µg/g (AM)	50th: 48.0 µg/g;	NR

Butyl benzyl phthalate

Monitoring

Personal Inhalation

Table 10: Data Extraction Tables of Exposure Monitoring Studies for Personal Inhalation

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Adibi et al. 2003 HERO ID: 674904 OQD: Medium	New York City, NY USA, US Scenario: Personal air samples in pregnant New York subjects (n = 30; DF = 1; Sampling Period: Mar., 2000 - Jul., 2000)	LOD: Not Reported LOQ: Not Reported	0.01 $\mu\text{g}/\text{m}^3$	0.63 $\mu\text{g}/\text{m}^3$	0.1 $\mu\text{g}/\text{m}^3$ (GM)	50th: 0.04 $\mu\text{g}/\text{m}^3$;	0.15 $\mu\text{g}/\text{m}^3$ (ASD)
Adibi et al. 2003 HERO ID: 674904 OQD: Medium	Krakow, Poland, PL Scenario: Personal air samples in pregnant Krakow subjects (n = 30; DF = 1; Sampling Period: Nov., 2000 - Mar., 2001)	LOD: Not Reported LOQ: Not Reported	0.0 $\mu\text{g}/\text{m}^3$	0.19 $\mu\text{g}/\text{m}^3$	0.04 $\mu\text{g}/\text{m}^3$ (GM)	50th: 0.02 $\mu\text{g}/\text{m}^3$;	0.04 $\mu\text{g}/\text{m}^3$ (ASD)
Okeme et al. 2018 HERO ID: 5017615 OQD: Medium	Toronto, CA Scenario: Three office workers sampled for 7 consecutive days, mainly indoors at home and office (passive poly-dimethylsiloxane brooch samplers) (n = 3; DF = 1; Sampling Period: winter, 2016)	LOD: 1.1 pg/ m^3 LOQ: 3.5 pg/ m^3	10.0 ng/ m^3	20.0 ng/ m^3	15.67 ng/ m^3 (AM)	50th: 17.0 ng/ m^3 ;	5.13 ng/ m^3 (ASD)

Butyl benzyl phthalate

Monitoring

Sediment

Table 11: Data Extraction Tables of Exposure Monitoring Studies for Sediment

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Lin et al. 2003 HERO ID: 680053 OQD: High	Vancouver, BC, CA Scenario: Sediment from North Central False Creek Harbor (n = 16; DF = NR; Sampling Period: Jan., 2003)	LOD: 0.5 ng/g LOQ: Not Reported	NR	NR	19.60 ppb (AM)	NR	3.77 ppb (ASD)
Lin et al. 2003 HERO ID: 680053 OQD: High	Vancouver, BC, CA Scenario: Sediment from East Basin False Creek Harbor (n = 16; DF = NR; Sampling Period: Jan., 2003)	LOD: 0.5 ng/g LOQ: Not Reported	NR	NR	44.97 ppb (AM)	NR	7.58 ppb (ASD)
Lin et al. 2003 HERO ID: 680053 OQD: High	Vancouver, BC, CA Scenario: Sediment from Marina-South False Creek Harbor (n = 16; DF = NR; Sampling Period: Jan., 2003)	LOD: 0.5 ng/g LOQ: Not Reported	NR	NR	21.75 ppb (AM)	NR	28.83 ppb (ASD)
Lin et al. 2003 HERO ID: 680053 OQD: High	Vancouver, BC, CA Scenario: Sediment from Cambie Bridge False Creek Harbor (n = 16; DF = NR; Sampling Period: Jan., 2003)	LOD: 0.5 ng/g LOQ: Not Reported	NR	NR	26.44 ppb (AM)	NR	9.17 ppb (ASD)
Parkman et al. 1995 HERO ID: 680108 OQD: Low	South east Sweden, SE Scenario: Sediment samples from upstream of Tarkett at Ronneby Brunn (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: Not Reported LOQ: Not Reported	NR	NR	23 ng/g (AM)	NR	7 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 OQD: Low	Gällivare, north central Sweden, SE Scenario: Sediment samples from Jutsajaure, Sweden (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	7 ng/g (AM)	NR	0 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 OQD: Low	Fuxerna socken, Sweden, SE Scenario: Sediment samples from Fräcksjön, Sweden (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.90 ppb LOQ: Not Reported	NR	NR	16 ng/g (AM)	NR	NR
Parkman et al. 1995 HERO ID: 680108 OQD: Low	Ucklum, Sweden, SE Scenario: Sediment samples from Härvsvatten, Sweden (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	22 ng/g (AM)	NR	14 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 OQD: Low	Hedemora, Sweden, SE Scenario: Sediment samples from Brunnsjön, Sweden (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	87 ng/g (AM)	NR	102 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 OQD: Low	Sovestad, Sweden, SE Scenario: Sediment samples from Krageholmssjön Reference lake, Sweden (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	7 ng/g (AM)	NR	7 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 OQD: Low	Södermanland, Sweden, SE Scenario: Sediment samples from Stensjön, Sweden (n = 3; DF = 1; Sampling Period: Oct., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	66 ng/g (AM)	NR	3 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 OQD: Low	Blekinge County, Sweden, SE Scenario: Sediment samples from Holmasjön, Sweden (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	4 ng/g (AM)	NR	6 ng/g (ASD)

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Butyl benzyl phthalate

Monitoring

Sediment

Table 11 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Parkman et al. 1995 HERO ID: 680108 <i>OQD:</i> Low	Dalsland, Sweden, SE Scenario: Sediment samples from Lesjön, Sweden (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	0 ng/g (AM)	NR	0 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 <i>OQD:</i> Low	Alvsborg, SE Scenario: Sediment samples from Breddreven, Sweden (n = 2; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	ND	NR	NR
Parkman et al. 1995 HERO ID: 680108 <i>OQD:</i> Low	ÖErebro, Sweden, SE Scenario: Sediment samples from Torrvärpen, Sweden (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	13 ng/g (AM)	NR	7 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 <i>OQD:</i> Low	SW, SE Scenario: Sediment samples from Halvarsnörel, Sweden (n = 3; DF = 0; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	ND	NR	NR
Parkman et al. 1995 HERO ID: 680108 <i>OQD:</i> Low	Orebro, SE Scenario: Sediment samples from Möckeln, Sweden (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	32 ng/g (AM)	NR	35 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 <i>OQD:</i> Low	Orebro, SE Scenario: Sediment samples from Årstaviken Bay, Sweden (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	4 ng/g (AM)	NR	2 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 <i>OQD:</i> Low	Trollhattan, SE Scenario: Sediment samples from the Gota Alv River North of Trollhattan, Sweden (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	6 ng/g (AM)	NR	5 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 <i>OQD:</i> Low	Ale, SE Scenario: Sediment samples from the Göta älv River, Bohus, Sweden (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	ND	NR	NR
Parkman et al. 1995 HERO ID: 680108 <i>OQD:</i> Low	Södermanland and Uppland, SE Scenario: Sediment samples from Riddarfjorden, Stockholm (n = 6; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	29 ng/g (AM)	NR	7 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 <i>OQD:</i> Low	Örebro County, SE Scenario: Sediment samples from ECO AB at Svartan River (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	179 ng/g (AM)	NR	288 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 <i>OQD:</i> Low	Örebro County, SE Scenario: Sediment samples from upstream of ECO AB at Ormaryd River (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	16 ng/g (AM)	NR	4 ng/g (ASD)
Parkman et al. 1995 HERO ID: 680108 <i>OQD:</i> Low	Blekinge, Southern Sweden, SE Scenario: Sediment samples from Tarkett in Ronnebyhamn (n = 3; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	194 ng/g (AM)	NR	215 ng/g (ASD)

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Monitoring

Sediment

Table 11 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Parkman et al. 1995 HERO ID: 680108 OQD: Low	Abisko, NE Sweden, SE Scenario: Sediment samples from Abiskojuare, Sweden (n = 2; DF = 1; Sampling Period: Sept., 1994)	LOD: 1.10 ppb LOQ: Not Reported	NR	NR	1 ng/g (AM)	NR	0 ng/g (ASD)
Mcdowell et al. 2001 HERO ID: 1322016 OQD: Medium	Ontario, CA Scenario: Sediments near STP Outflow in Hamilton Harbour (n = 5; DF = 0; Sampling Period: Summer, 1997)	LOD: 0.11 µg/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Liu et al. 2014 HERO ID: 2349860 OQD: Medium	Pearl River Delta region, CN Scenario: Zhujiang river sediment (n = 11; DF = <1; Sampling Period: Jul., 2006)	LOD: 1.9 pg LOQ: 1.12-8.59 ng/g	ND	0.113 µg/g	0.033 µg/g (AM)	50th: 0.024 µg/g;	0.033 µg/g (ASD)
Liu et al. 2014 HERO ID: 2349860 OQD: Medium	Pearl River Delta region, CN Scenario: Dongjiang river sediment (n = 21; DF = <1; Sampling Period: Jul., 2006)	LOD: 1.9 pg LOQ: 1.12-8.59 ng/g	ND	0.022 µg/g	0.005 µg/g (AM)	50th: 0.006 µg/g;	0.006 µg/g (ASD)
Liu et al. 2014 HERO ID: 2349860 OQD: Medium	Pearl River Delta region, CN Scenario: Xijiang river sediment (n = 15; DF = <1; Sampling Period: Jul., 2006)	LOD: 1.9 pg LOQ: 1.12-8.59 ng/g	ND	0.013 µg/g	0.002 µg/g (AM)	50th: 0.006 µg/g;	0.004 µg/g (ASD)
Liu et al. 2014 HERO ID: 2349860 OQD: Medium	Pearl River Delta region, CN Scenario: Beijiang river sediment (n = 11; DF = <1; Sampling Period: Jul., 2006)	LOD: 1.9 pg LOQ: 1.12-8.59 ng/g	ND	0.012 µg/g	0.003 µg/g (AM)	50th: 0.007 µg/g;	0.004 µg/g (ASD)
Liu et al. 2014 HERO ID: 2349860 OQD: Medium	Pearl River Delta region, CN Scenario: Shunde river sediment (n = 10; DF = <1; Sampling Period: Jul., 2006)	LOD: 1.9 pg LOQ: 1.12-8.59 ng/g	ND	0.009 µg/g	0.003 µg/g (AM)	50th: 0.004 µg/g;	0.003 µg/g (ASD)
Tran et al. 2014 HERO ID: 2519056 OQD: Medium	Essonne, FR Scenario: Sediment from WWTP influent water (n = 48; DF = NR; Sampling Period: Feb., 2010 - Feb., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	40.1 µg/L (GM)	NR	11.0 µg/L (GSD)
Tran et al. 2014 HERO ID: 2519056 OQD: Medium	Essonne, FR Scenario: Sediment from WWTP effluent water (n = 48; DF = NR; Sampling Period: Feb., 2010 - Feb., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	34.5 µg/L (GM)	NR	14.4 µg/L (GSD)
Zhang et al. 2015 HERO ID: 3045478 OQD: Medium	Wangyang River (WYR), Shijiazhuang City, Hebei Province, CN Scenario: Sediment (0-5 cm) from 13 sites along the Wangyang River downstream of WWTP discharge (n = 39; DF = 0.62; Sampling Period: Jun., 2013)	LOD: Not Reported LOQ: Not Reported	ND	0.111 µg/L	0.028 µg/L (AM)	50th: 0.034 µg/L;	0.029 µg/L (ASD)
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 1 (Harbor entrance) (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR

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Table 11 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 2 (Harbor entrance) (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 3 (Harbor entrance) (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 4 (Love River, port) (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 5 (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 6 (Canon River, port) (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 7 (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 8 (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 9 (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 10 (Jen-Gen River) (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 11 (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 12 (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 13 (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 14 (port) (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 15 (Harbor outlet) (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 16 (port) (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 17 (port) (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 18 (Salt River, port) (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 19 (Harbor outlet) (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Chen et al. 2016 HERO ID: 3540854 OQD: Medium	Kaohsiung Harbor, TW Scenario: Surface sediment from Kaohsiung Harbor - Site 20 (Harbor outlet) (n = 4; DF = 0; Sampling Period: Feb., 2013 - Oct., 2013)	LOD: 13.9 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Surface sediment (0-10cm) from aquaculture fish ponds in Pearl River Delta - Zhongshan (n = 12; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: 0.05 ng/g LOQ: 8 ng/g	NR	NR	0.02 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Surface sediment (0-10cm) from aquaculture fish ponds in Pearl River Delta - Jiangmen (n = 8; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: 0.05 ng/g LOQ: 8 ng/g	NR	NR	0.04 mg/kg (AM)	NR	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Surface sediment (0-10cm) from aquaculture fish ponds in Pearl River Delta - Nanhai (n = 12; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: 0.05 ng/g LOQ: 8 ng/g	NR	NR	0.03 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Surface sediment (0-10cm) from aquaculture fish ponds in Pearl River Delta - Shunde (n = 16; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: 0.05 ng/g LOQ: 8 ng/g	NR	NR	0.12 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Surface sediment (0-10cm) from aquaculture fish ponds in Pearl River Delta - Huizhou (n = 8; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: 0.05 ng/g LOQ: 8 ng/g	NR	NR	0.09 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Surface sediment (0-10cm) from aquaculture fish ponds in Pearl River Delta - Huadu (n = 8; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: 0.05 ng/g LOQ: 8 ng/g	NR	NR	0.13 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Surface sediment (0-10cm) from aquaculture fish ponds in Pearl River Delta - Dongguan (n = 8; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: 0.05 ng/g LOQ: 8 ng/g	NR	NR	0.08 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Surface sediment (0-10cm) from aquaculture fish ponds in Pearl River Delta - Guangzhou (n = 8; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: 0.05 ng/g LOQ: 8 ng/g	NR	NR	0.06 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Surface sediment (0-10cm) from aquaculture fish ponds in Pearl River Delta - Nansha (n = 8; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: 0.05 ng/g LOQ: 8 ng/g	NR	NR	0.15 mg/kg (AM)	NR	NR
Lee et al. 2019 HERO ID: 5043593 OQD: High	Pyeongtaek and Asan, Gyeonggi Province, KR Scenario: Lake Sediment affected from industrial complex (n = 47; DF = 0; Sampling Period: Oct., 2016 - Jul., 2017)	LOD: 0.26 µg/kg LOQ: 0.79 µg/kg	NR	NR	ND	NR	NR
Sun et al. 2014 HERO ID: 5188487 OQD: High	Pearl River Delta region, CN Scenario: Sediments in dry season (n = 12; DF = <1; Sampling Period: Dec., 2008)	LOD: 0.13 ng/g LOQ: Not Reported	<LOD	38 ng/g	NR	NR	NR
Sun et al. 2014 HERO ID: 5188487 OQD: High	Pearl River Delta region, CN Scenario: Sediments in wet season (n = 12; DF = <1; Sampling Period: Jul., 2009)	LOD: 0.13 ng/g LOQ: Not Reported	<LOD	2.9 ng/g	NR	NR	NR

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Sardiña et al. 2019 HERO ID: 5412432 OQD: High	Melbourne; Ballarat; Bendigo; Geelong; Latrobe Valley, AU Scenario: Sediment from aquatic ecosystems on various land-use types (n = 25; DF = 0; Sampling Period: Aug., 2019)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Sediment from the Haizhou Bay in the Yellow Sea (n = 5; DF = 1; Sampling Period: Nov., 2014)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [0.09 mg/kg; 0.07 mg/kg; 0.04 mg/kg; 0.07 mg/kg; 0.04 mg/kg]				
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Sediment from the Bonhai Sea in the Yellow River Estuary outlet (n = 7; DF = 0.57; Sampling Period: Nov., 2014)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [0.05 mg/kg; 0.02 mg/kg; 0.04 mg/kg; 0.03 mg/kg; ND; ND; ND]				
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Sediment from the Yellow Sea in the Blue Economic Zone (n = 6; DF = 0.833; Sampling Period: Nov., 2014)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [ND; 0.05 mg/kg; 0.04 mg/kg; 0.11 mg/kg; 0.06 mg/kg; 0.02 mg/kg]				
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Sediment from the Bonhai Sea and the Yellow Sea (n = 20; DF = 0.95; Sampling Period: Nov., 2014)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [ND; 0.09 mg/kg; 0.02 mg/kg; 0.03 mg/kg; 0.09 mg/kg; 0.03 mg/kg; 0.11 mg/kg; 0.02 mg/kg; 0.04 mg/kg; 0.11 mg/kg; 0.02 mg/kg; 0.03 mg/kg; 0.07 mg/kg; 0.02 mg/kg; 0.22 mg/kg; 0.07 mg/kg; 0.15 mg/kg; 0.09 mg/kg; 0.03 mg/kg; 0.02 mg/kg]				
Wu et al. 2019 HERO ID: 5433502 OQD: High	Yuyao City, Zhejiang Province, CN Scenario: Sediment samples from downwind of a plastic market (n = 16; DF = 1; Sampling Period: May, 2017)	LOD: Not Reported LOQ: 1.8 ng/g	0.4 ng/g	3.2 ng/g	1.8 ng/g	50th: 1.9 ng/g; (AM)	NR
Chen et al. 2017 HERO ID: 5494792 OQD: Medium	Kaohsiung Ocean Dredged Material Disposal Site Taiwan; Area I: centre of disposed area, TW Scenario: Sediment (0-15 cm) from centers of Kaohsiung Ocean Dredged Material Disposal Site - Area I, Site 6 (n = 44; DF = 1; Sampling Period: Mar., 2014 - Oct., 2014)	LOD: 2.8 ng/g LOQ: Not Reported	NR	NR	18.2 ng/g (AM)	NR	14.1 ng/g (ASD)
Chen et al. 2017 HERO ID: 5494792 OQD: Medium	Kaohsiung Ocean Dredged Material Disposal Site Taiwan; Area I: centre of disposed area, TW Scenario: Sediment (0-15 cm) from centers of Kaohsiung Ocean Dredged Material Disposal Site - Area I, Site 7 (n = 44; DF = 1; Sampling Period: Mar., 2014 - Oct., 2014)	LOD: 2.8 ng/g LOQ: Not Reported	NR	NR	90.7 ng/g (AM)	NR	121 ng/g (ASD)
Chen et al. 2017 HERO ID: 5494792 OQD: Medium	Kaohsiung Ocean Dredged Material Disposal Site Taiwan; Area I: centre of disposed area, TW Scenario: Sediment (0-15 cm) from centers of Kaohsiung Ocean Dredged Material Disposal Site - Area I, Site 8 (n = 44; DF = 1; Sampling Period: Mar., 2014 - Oct., 2014)	LOD: 2.8 ng/g LOQ: Not Reported	NR	NR	29.7 ng/g (AM)	NR	16.9 ng/g (ASD)

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Chen et al. 2017 HERO ID: 5494792 OQD: Medium	Kaohsiung Ocean Dredged Material Disposal Site Taiwan; Area I: centre of disposed area, TW Scenario: Sediment (0-15 cm) from centers of Kaohsiung Ocean Dredged Material Disposal Site - Area I, Site 9 (n = 44; DF = 1; Sampling Period: Mar., 2014 - Oct., 2014)	LOD: 2.8 ng/g LOQ: Not Reported	NR	NR	12.6 ng/g (AM)	NR	9.6 ng/g (ASD)
Chen et al. 2017 HERO ID: 5494792 OQD: Medium	Kaohsiung Ocean Dredged Material Disposal Site Taiwan; Area II: vertex angle of disposed area, TW Scenario: Sediment (0-15 cm) from vertex angle of Kaohsiung Ocean Dredged Material Disposal Site - Area II, Site 1 (n = 44; DF = 1; Sampling Period: Mar., 2014 - Oct., 2014)	LOD: 2.8 ng/g LOQ: Not Reported	NR	NR	9.9 ng/g (AM)	NR	8.1 ng/g (ASD)
Chen et al. 2017 HERO ID: 5494792 OQD: Medium	Kaohsiung Ocean Dredged Material Disposal Site Taiwan; Area II: vertex angle of disposed area, TW Scenario: Sediment (0-15 cm) from vertex angle of Kaohsiung Ocean Dredged Material Disposal Site - Area II, Site 2 (n = 44; DF = 1; Sampling Period: Mar., 2014 - Oct., 2014)	LOD: 2.8 ng/g LOQ: Not Reported	NR	NR	9.7 ng/g (AM)	NR	6.7 ng/g (ASD)
Chen et al. 2017 HERO ID: 5494792 OQD: Medium	Kaohsiung Ocean Dredged Material Disposal Site Taiwan; Area II: vertex angle of disposed area, TW Scenario: Sediment (0-15 cm) from vertex angle of Kaohsiung Ocean Dredged Material Disposal Site - Area II, Site 3 (n = 44; DF = 1; Sampling Period: Mar., 2014 - Oct., 2014)	LOD: 2.8 ng/g LOQ: Not Reported	NR	NR	40.8 ng/g (AM)	NR	42.4 ng/g (ASD)
Chen et al. 2017 HERO ID: 5494792 OQD: Medium	Kaohsiung Ocean Dredged Material Disposal Site Taiwan; Area II: vertex angle of disposed area, TW Scenario: Sediment (0-15 cm) from vertex angle of Kaohsiung Ocean Dredged Material Disposal Site - Area II, Site 4 (n = 44; DF = 1; Sampling Period: Mar., 2014 - Oct., 2014)	LOD: 2.8 ng/g LOQ: Not Reported	NR	NR	15.7 ng/g (AM)	NR	6.7 ng/g (ASD)
Chen et al. 2017 HERO ID: 5494792 OQD: Medium	Kaohsiung Ocean Dredged Material Disposal Site Taiwan; Area II: vertex angle of disposed area, TW Scenario: Sediment (0-15 cm) from vertex angle of Kaohsiung Ocean Dredged Material Disposal Site - Area II, Site 5 (n = 44; DF = 1; Sampling Period: Mar., 2014 - Oct., 2014)	LOD: 2.8 ng/g LOQ: Not Reported	NR	NR	12.6 ng/g (AM)	NR	13.7 ng/g (ASD)
Chen et al. 2017 HERO ID: 5494792 OQD: Medium	Kaohsiung Ocean Dredged Material Disposal Site Taiwan; Area R: outer disposal site, TW Scenario: Sediment (0-15 cm) from outer of Kaohsiung Ocean Dredged Material Disposal Site - Area R, Site 10 (n = 44; DF = 1; Sampling Period: Mar., 2014 - Oct., 2014)	LOD: 2.8 ng/g LOQ: Not Reported	NR	NR	6.5 ng/g (AM)	NR	4 ng/g (ASD)
Chen et al. 2017 HERO ID: 5494792 OQD: Medium	Kaohsiung Ocean Dredged Material Disposal Site Taiwan; Area R: outer disposal site, TW Scenario: Sediment (0-15 cm) from outer of Kaohsiung Ocean Dredged Material Disposal Site - Area R, Site 11 (n = 44; DF = 0; Sampling Period: Mar., 2014 - Oct., 2014)	LOD: 2.8 ng/g LOQ: Not Reported	NR	NR	ND	NR	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Zhang et al. 2019 HERO ID: 5933853 <i>OQD:</i> High	East China Sea, CN Scenario: Sediment samples from East China Sea (n = 19; DF = 0.1053; Sampling Period: Mar., 2017 - Apr., 2017)	LOD: 0.12-1.6 µg/kg LOQ: Not Reported	POINT VALUE(S): [ND; ND; ND; ND; ND; ND; ND; 83.5 µg/kg; ND; ND; ND; ND; ND; ND; ND; 34.8 µg/kg; ND; ND; ND; ND]				
Lee et al. 2020 HERO ID: 6815985 <i>OQD:</i> Medium	East Sea, South Sea, and Yellow Sea, Korea, KR Scenario: Surface sediment from Korea coastal regions (n = 50; DF = 0.98; Sampling Period: 2016)	LOD: Not Reported LOQ: 0.146 ng/g	<LOQ	1322 ng/g	28.3 ng/g (AM)	50th: 0.68 ng/g;	NR
Nagorka et al. 2020 HERO ID: 6816080 <i>OQD:</i> High	Elbe with tributaries; Rhine; Saar; Danube, DE Scenario: SPM from 11 federal German waterway sites in 2005/06 (n = 11; DF = 0.91; Sampling Period: 2005 - 2006)	LOD: 2.6 ng/g LOQ: 7.8 ng/g	<LOQ	52 ng/g	20 ng/g (AM)	50th: 18 ng/g;	NR
Nagorka et al. 2020 HERO ID: 6816080 <i>OQD:</i> High	Elbe with tributaries; Rhine; Saar; Danube, DE Scenario: SPM from 13 federal German waterway sites in 2017 (n = 13; DF = 0.27; Sampling Period: 2017)	LOD: 2.6 ng/g LOQ: 7.8 ng/g	<LOQ	25 ng/g	<LOQ	50th: <LOQ;	NR
Zhang et al. 2020 HERO ID: 6957439 <i>OQD:</i> Medium	East China Sea, CN Scenario: Sediment samples from East China Sea - Summer (n = 56; DF = 0.6607; Sampling Period: Jul., 2015)	LOD: 0.12-1.6 µg/kg LOQ: Not Reported	NR	NR	NR	NR	NR
McConnell et al. 2007 HERO ID: 10365669‡ <i>OQD:</i> High <i>MBzP</i>	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Surficial sediment (0.5-1.0cm) from False Creek Harbour - MBzP (n = 10; DF = 1; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 0.042 ng/g LOQ: 0.11 ng/g	NR	NR	0.90 ng/g (AM)	NR	2.6 ng/g (ASD)
McConnell et al. 2007 HERO ID: 10365669 <i>OQD:</i> High	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Surficial sediment (0.5-1.0cm) from False Creek Harbour (n = 10; DF = 1; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 2.2 ng/g LOQ: 5.7 ng/g	NR	NR	15 ng/g (AM)	NR	1.6 ng/g (ASD)
Huang et al. 2008 HERO ID: 675207 <i>OQD:</i> High	TW Scenario: Phthalate concentrations in sediment from Taiwan rivers - low/high flow average (n = 128; DF = NR; Sampling Period: Aug., 2004 - Apr., 2005)	LOD: 0.006 mg/kg LOQ: Not Reported	ND	ND	0.17 mg/kg (AM)	NR	NR
Huang et al. 2008 HERO ID: 675207 <i>OQD:</i> High	TW Scenario: Phthalate concentrations in sediment from Taiwan rivers - low-flow season (n = 64; DF = NR; Sampling Period: Mar., 2005 - Apr., 2005)	LOD: 0.006 mg/kg LOQ: Not Reported	ND	ND	0.22 mg/kg (AM)	NR	NR
Huang et al. 2008 HERO ID: 675207 <i>OQD:</i> High	TW Scenario: Phthalate concentrations in sediment from Taiwan rivers - high-flow season (n = 64; DF = NR; Sampling Period: Aug., 2004 - Oct., 2004)	LOD: 0.006 mg/kg LOQ: Not Reported	ND	ND	0.13 mg/kg (AM)	NR	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Blair et al. 2009 HERO ID: 787951 ‡ <i>OQD:</i> Medium <i>MBzP</i>	Vancouver, British Columbia, CA Scenario: Sediment from False Creek, Vancouver (n = 10; DF = 1.0; Sampling Period: May, 2004 - Sept., 2006)	LOD: 0.01 ng/g LOQ: Not Reported	0.19 ng/g	3.02 ng/g	NR	NR	NR
Antizar-Ladislao et al. 2009 HERO ID: 1338995 <i>OQD:</i> High	Cantabria, northern Spain, ES Scenario: Shallow marine sediments from the coast of Cantabria, Spain. (n = 5; DF = 0.2; Sampling Period: Jul., 2007 - Sept., 2007)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	50th: 0.44 ng/g;	NR
Teil et al. 2014 HERO ID: 2149497 <i>OQD:</i> Medium	Roinville, FR Scenario: Sediment from Orge River at Roinville (n = 2; DF = NR; Sampling Period: Sept., 2008)	LOD: 13.4 pg/L LOQ: Not Reported	NR	NR	<LOQ	NR	NR
Teil et al. 2014 HERO ID: 2149497 <i>OQD:</i> Medium	Viry-Chatillon, FR Scenario: Sediment from Orge River at Viry-Chatillon (n = 2; DF = NR; Sampling Period: Oct., 2009)	LOD: 13.4 pg/L LOQ: Not Reported	NR	NR	52 ng/g (AM)	NR	NR
Teil et al. 2014 HERO ID: 2149497 <i>OQD:</i> Medium	Epinay-sur-Seine, FR Scenario: Sediment from Seine River at Epinay-sur-Seine (n = 2; DF = NR; Sampling Period: Aug., 2008)	LOD: 13.4 pg/L LOQ: Not Reported	NR	NR	203 ng/g (AM)	NR	NR
Teil et al. 2014 HERO ID: 2149497 <i>OQD:</i> Medium	Triel-sur-Seine, FR Scenario: Sediment from Seine River at Triel-sur-Seine (n = 2; DF = NR; Sampling Period: Nov., 2009)	LOD: 13.4 pg/L LOQ: Not Reported	NR	NR	11538 ng/g (AM)	NR	NR
Sánchez-Avila et al. 2013 HERO ID: 2149885 <i>OQD:</i> Medium	Industry Discharge Site (FE), ES Scenario: Sediment at Industry Discharge Site (n = 1; DF = 1; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	8.2 ng/g (AM)	NR	NR
Sánchez-Avila et al. 2013 HERO ID: 2149885 <i>OQD:</i> Medium	Santander Harbor (PS), ES Scenario: Sediment at Santander Harbor (n = 1; DF = 1; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	53 ng/g (AM)	NR	NR
Sánchez-Avila et al. 2013 HERO ID: 2149885 <i>OQD:</i> Medium	WWTP Discharge (GA), ES Scenario: Sediment at WWTP Discharge (n = 1; DF = 1; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	15 ng/g (AM)	NR	NR
Mackintosh et al. 2006 HERO ID: 2158899 <i>OQD:</i> High	Vancouver, CA Scenario: Bottom sediment samples (n = 17; DF = 1.00; Sampling Period: 2006)	LOD: 6.1 ng/g LOQ: Not Reported	20.7 ng/g	50.5 ng/g	32.4 ng/g (GM)	NR	NR
Mackintosh et al. 2006 HERO ID: 2158899 <i>OQD:</i> High	Vancouver, CA Scenario: Suspended sediment samples (n = 17; DF = 0.65; Sampling Period: 2006)	LOD: 6.1 ng/g LOQ: Not Reported	1250 ng/g	5650 ng/g	2655 ng/g (GM)	NR	NR
Stewart et al. 2014 HERO ID: 2215424 <i>OQD:</i> High	Auckland, NZ Scenario: Estuarine sediments from Hobson Bay in Auckland, New Zealand. (n = 2; DF = 1; Sampling Period: Mar., 2008)	LOD: Not Reported LOQ: 300.0 ng/g	NR	NR	560 ng/g (AM)	NR	200 ng/g (SE)

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Stewart et al. 2014 HERO ID: 2215424 OQD: High	Auckland, NZ Scenario: Estuarine sediments from Milford Marina in Auckland, New Zealand. (n = 2; DF = 1; Sampling Period: Mar., 2008)	LOD: Not Reported LOQ: 300.0 ng/g	NR	NR	1600 ng/g (AM)	NR	10 ng/g (SE)
Yang et al. 2015 HERO ID: 2816375 OQD: High	The Dianbao River, Southern Taiwan, TW Scenario: Sediment samples collected during the dry season along the Dianbao River (n = 30; DF = 0.33; Sampling Period: Oct., 2011 - Sept., 2012)	LOD: 1.0 µg/kg LOQ: Not Reported	NR	NR	8 µg/kg (AM)	NR	41 µg/kg (ASD)
Yang et al. 2015 HERO ID: 2816375 OQD: High	The Dianbao River, Southern Taiwan, TW Scenario: Sediment samples collected during the rainy season along the Dianbao River (n = 5; DF = 1; Sampling Period: Oct., 2011 - Sept., 2012)	LOD: 1.0 µg/kg LOQ: Not Reported	NR	NR	5 µg/kg (AM)	NR	1 µg/kg (ASD)
Yang et al. 2015 HERO ID: 2816375 OQD: High	The Dianbao River, Southern Taiwan, TW Scenario: Sediment samples collected during throughout the year off the Jiaosu Bridge (n = 7; DF = 0.57; Sampling Period: Oct., 2011 - Sept., 2012)	LOD: 1.0 µg/kg LOQ: Not Reported	NR	NR	3 µg/kg (AM)	NR	4 µg/kg (ASD)
Yang et al. 2015 HERO ID: 2816375 OQD: High	The Dianbao River, Southern Taiwan, TW Scenario: Sediment samples collected during throughout the year off the Shengxing Bridge (n = 7; DF = 0.43; Sampling Period: Oct., 2011 - Sept., 2012)	LOD: 1.0 µg/kg LOQ: Not Reported	NR	NR	33 µg/kg (AM)	NR	84 µg/kg (ASD)
Yang et al. 2015 HERO ID: 2816375 OQD: High	The Dianbao River, Southern Taiwan, TW Scenario: Sediment samples collected during throughout the year off the Zhongqi Bridge (n = 7; DF = 0.57; Sampling Period: Oct., 2011 - Sept., 2012)	LOD: 1.0 µg/kg LOQ: Not Reported	NR	NR	1 µg/kg (AM)	NR	2 µg/kg (ASD)
Yang et al. 2015 HERO ID: 2816375 OQD: High	The Dianbao River, Southern Taiwan, TW Scenario: Sediment samples collected during throughout the year off the Wulilin Bridge (n = 7; DF = 0.14; Sampling Period: Oct., 2011 - Sept., 2012)	LOD: 1.0 µg/kg LOQ: Not Reported	NR	NR	<LOD	NR	2 µg/kg (ASD)
Yang et al. 2015 HERO ID: 2816375 OQD: High	The Dianbao River, Southern Taiwan, TW Scenario: Sediment samples collected during throughout the year off the Yanpu Bridge (n = 7; DF = 0.43; Sampling Period: Oct., 2011 - Sept., 2012)	LOD: 1.0 µg/kg LOQ: Not Reported	NR	NR	1 µg/kg (AM)	NR	2 µg/kg (ASD)
Net et al. 2015 HERO ID: 3012380 OQD: Medium	Zingem, Scheldt basin, BE Scenario: Sediment from watercourse in the cross-boarder of Northern France-Belgium (n = Not Reported; DF = NR; Sampling Period: Jul., 2014 - Oct., 2014)	LOD: Not Reported LOQ: 1.25 µg/kg	NR	NR	0.6 µg/g (AM)	NR	0.06 µg/g (ASD)

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Butyl benzyl phthalate

Monitoring

Sediment

Table 11 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Net et al. 2015 HERO ID: 3012380 <i>OQD:</i> Medium	Zingem, Scheldt basin, BE Scenario: Suspended solid matter from watercourse in the cross-boarder of Northern France-Belgium (n = Not Reported; DF = NR; Sampling Period: Jul., 2014 - Oct., 2014)	LOD: Not Reported LOQ: 0.4 µg/kg	NR	NR	33.3 µg/g (AM)	NR	3.3 µg/g (ASD)

[‡] Data extraction results are for metabolite concentrations.

Table 12: Data Extraction Tables of Exposure Monitoring Studies for Soil

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Zeng et al. 2009 HERO ID: 680473 OQD: High	Guangzhou City, CN Scenario: Urban soil along roadsides in Guangzhou City - BBP (n = 17; DF = 0.82; Sampling Period: Dec., 2005)	LOD: Not Reported LOQ: Not Reported	ND	1.58 $\mu\text{g/g}$	0.402 $\mu\text{g/g}$ (AM)	50th: 0.753 $\mu\text{g/g}$;	0.461 $\mu\text{g/g}$ (ASD)
Zeng et al. 2009 HERO ID: 680473 OQD: High	Guangzhou City, CN Scenario: Urban soil in resident areas of Guangzhou City - BBP (n = 13; DF = 0.54; Sampling Period: Dec., 2005)	LOD: Not Reported LOQ: Not Reported	ND	0.163 $\mu\text{g/g}$	0.032 $\mu\text{g/g}$ (AM)	50th: 0.025 $\mu\text{g/g}$;	0.05 $\mu\text{g/g}$ (ASD)
Zeng et al. 2009 HERO ID: 680473 OQD: High	Guangzhou City, CN Scenario: Urban soil in Guangzhou City parks- BBP (n = 7; DF = 1.0; Sampling Period: Dec., 2005)	LOD: Not Reported LOQ: Not Reported	ND	0.156 $\mu\text{g/g}$	0.047 $\mu\text{g/g}$ (AM)	50th: 0.024 $\mu\text{g/g}$;	0.06 $\mu\text{g/g}$ (ASD)
Liu et al. 2010 HERO ID: 697396 OQD: Medium	Hubei Province, CN Scenario: Topsoil of JiangHan Plain - Summer (n = 9; DF = 0.33; Sampling Period: Jul., 2007)	LOD: 22-341 ng/L LOQ: Not Reported	ND	46.1 ng/g	11.7 ng/g (GM)	NR	NR
Liu et al. 2010 HERO ID: 697396 OQD: Medium	Hubei Province, CN Scenario: Topsoil of JiangHan Plain - Winter (n = 17; DF = 0.53; Sampling Period: Jan., 2008)	LOD: 22-341 ng/L LOQ: Not Reported	ND	81.9 ng/g	18.1 ng/g (GM)	NR	NR
Vikelsøe et al. 2002 HERO ID: 789658 OQD: Medium	Roskilde, Lille Valby, DK Scenario: Uncultured soil from preserved cattle grazing area (n = 20; DF = NR; Sampling Period: Oct., 1996)	LOD: Not Reported LOQ: Not Reported	NR	NR	0.09 $\mu\text{g/kg}$ (GM)	NR	NR
Vikelsøe et al. 2002 HERO ID: 789658 OQD: Medium	Roskilde, Lille Valby, DK Scenario: 40-year ecologically cultured soil with some use of artificial fertilizer (n = 20; DF = NR; Sampling Period: Oct., 1996)	LOD: Not Reported LOQ: Not Reported	NR	NR	0.12 $\mu\text{g/kg}$ (GM)	NR	NR
Vikelsøe et al. 2002 HERO ID: 789658 OQD: Medium	Roskilde, Lille Valby, DK Scenario: 5-year ecologically cultured soil using manure from local livestock (n = 20; DF = NR; Sampling Period: Oct., 1996)	LOD: Not Reported LOQ: Not Reported	NR	NR	0.38 $\mu\text{g/kg}$ (GM)	NR	NR
Vikelsøe et al. 2002 HERO ID: 789658 OQD: Medium	Roskilde, Lille Valby, DK Scenario: Conventionally cultured and artificially fertilized soil with calcium ammonium nitrate and NPK (n = 20; DF = NR; Sampling Period: Oct., 1996)	LOD: Not Reported LOQ: Not Reported	NR	NR	0.06 $\mu\text{g/kg}$ (GM)	NR	NR
Vikelsøe et al. 2002 HERO ID: 789658 OQD: Medium	Roskilde, Lille Valby, DK Scenario: Conventionally cultured low sludge amended soil from WWTP and cow manure (n = 20; DF = NR; Sampling Period: Oct., 1996)	LOD: Not Reported LOQ: Not Reported	NR	NR	0.06 $\mu\text{g/kg}$ (GM)	NR	NR

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Butyl benzyl phthalate

Monitoring

Soil

Table 12 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Vikelsøe et al. 2002 HERO ID: 789658 <i>OQD:</i> Medium	Roskilde, Lille Valby, DK Scenario: Conventionally cultured normal sludge amended soil from WWTP (n = 20; DF = NR; Sampling Period: Oct., 1996)	LOD: Not Reported LOQ: Not Reported	NR	NR	0.01 $\mu\text{g}/\text{kg}$ (GM)	NR	NR
Vikelsøe et al. 2002 HERO ID: 789658 <i>OQD:</i> Medium	Roskilde, Lille Valby, DK Scenario: 25-year high sludge amended followed by 6-year conventional cultured and artificially fertilized soil - 1996 (n = 20; DF = NR; Sampling Period: Oct., 1996)	LOD: Not Reported LOQ: Not Reported	NR	NR	29 $\mu\text{g}/\text{kg}$ (GM)	NR	NR
Vikelsøe et al. 2002 HERO ID: 789658 <i>OQD:</i> Medium	Roskilde, Lille Valby, DK Scenario: 25-year high sludge amended followed by 6-year conventional cultured and artificially fertilized soil - 1998 (n = 20; DF = NR; Sampling Period: Nov., 1998)	LOD: Not Reported LOQ: Not Reported	NR	NR	32 $\mu\text{g}/\text{kg}$ (GM)	NR	NR
Vikelsøe et al. 2002 HERO ID: 789658 <i>OQD:</i> Medium	Roskilde, Lille Valby, DK Scenario: Runoff soil from uncultured cattle grazing meadow receiving surface run-off from sludge storage facility (n = 20; DF = NR; Sampling Period: Oct., 1996)	LOD: Not Reported LOQ: Not Reported	NR	NR	5.8 $\mu\text{g}/\text{kg}$ (GM)	NR	NR
Jang et al. 2001 HERO ID: 789748 <i>OQD:</i> Medium	Florida, US Scenario: Recovered soil fines from Site A, Trip 1 (n = 12; DF = 1; Sampling Period: 2001)	LOD: 0.3 mg/kg LOQ: Not Reported	1.6 mg/kg	35.6 mg/kg	NR	NR	NR
Jang et al. 2001 HERO ID: 789748 <i>OQD:</i> Medium	Florida, US Scenario: Recovered soil fines from Site B, Trip 1 (n = 5; DF = 0.6; Sampling Period: 2001)	LOD: 0.3 mg/kg LOQ: Not Reported	2.6 mg/kg	17.6 mg/kg	NR	NR	NR
Jang et al. 2001 HERO ID: 789748 <i>OQD:</i> Medium	Florida, US Scenario: Recovered soil fines from Site C, Trip 1 (n = 6; DF = 0.5; Sampling Period: 2001)	LOD: 0.3 mg/kg LOQ: Not Reported	4.0 mg/kg	30.1 mg/kg	NR	NR	NR
Jang et al. 2001 HERO ID: 789748 <i>OQD:</i> Medium	Florida, US Scenario: Recovered soil fines from 12 Sites, Trip 3 (n = 12; DF = 0.417; Sampling Period: 2001)	LOD: 0.3 mg/kg LOQ: Not Reported	1.1 mg/kg	13.3 mg/kg	NR	NR	NR
Jang et al. 2001 HERO ID: 789748 <i>OQD:</i> Medium	Florida, US Scenario: Recovered soil fines from Site D, Trip 5 (n = 6; DF = 1; Sampling Period: 2001)	LOD: 0.3 mg/kg LOQ: Not Reported	1.0 mg/kg	20.5 mg/kg	NR	NR	NR
Ma et al. 2013 HERO ID: 1597686 <i>OQD:</i> Medium	Zhejiang province, CN Scenario: Soil from control fallow with no plants present near an e-waste site (n = 5; DF = NR; Sampling Period: Winter, 2010)	LOD: 68-135 $\mu\text{g}/\text{g}$ LOQ: Not Reported	NR	NR	8.17 $\mu\text{g}/\text{kg}$ (AM)	NR	NR
Ma et al. 2013 HERO ID: 1597686 <i>OQD:</i> Medium	Zhejiang province, CN Scenario: Soil from vegetable plots near an e-waste site (n = 5; DF = NR; Sampling Period: Winter, 2010)	LOD: 68-135 $\mu\text{g}/\text{g}$ LOQ: Not Reported	NR	NR	8.17 $\mu\text{g}/\text{kg}$ (AM)	NR	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Ma et al. 2013 HERO ID: 1597686 OQD: Medium	Zhejiang province, CN Scenario: Unplanted fallow with long-term flooding near an e-waste site (n = 5; DF = NR; Sampling Period: Winter, 2010)	LOD: 68-135 µg/g LOQ: Not Reported	NR	NR	8.17 µg/kg (AM)	NR	NR
Ma et al. 2013 HERO ID: 1597686 OQD: Medium	Zhejiang province, CN Scenario: Unplanted fallow with alternate wet and dry conditions near an e-waste site (n = 5; DF = NR; Sampling Period: Winter, 2010)	LOD: 68-135 µg/g LOQ: Not Reported	NR	NR	5.45 µg/kg (AM)	NR	NR
Hongjun et al. 2013 HERO ID: 1639226 OQD: High	Binzhou City, CN Scenario: Topsoil from urban area in Bincheng District (n = 17; DF = 0; Sampling Period: Sept., 2009)	LOD: Not Reported LOQ: Not Reported	ND	ND	ND	50th: ND;	ND
Hongjun et al. 2013 HERO ID: 1639226 OQD: High	Binzhou City, CN Scenario: Topsoil from suburban area in Bincheng District (n = 28; DF = 0; Sampling Period: Sept., 2009)	LOD: Not Reported LOQ: Not Reported	ND	ND	ND	50th: ND;	ND
Hongjun et al. 2013 HERO ID: 1639226 OQD: High	Binzhou City, CN Scenario: Topsoil from rural area in Bincheng District (n = 37; DF = 0; Sampling Period: Sept., 2009)	LOD: Not Reported LOQ: Not Reported	ND	ND	ND	50th: ND;	ND
Kong et al. 2012 HERO ID: 2518980 OQD: High	Tianjin City, CN Scenario: Soil from suburban farmland (n = 52; DF = 1.00; Sampling Period: Nov., 2009)	LOD: Not Reported LOQ: Not Reported	0.000 µg/g	1.79 µg/g	0.073 µg/g (AM)	50th: 0.003 µg/g;	0.265 µg/g (ASD)
Kong et al. 2012 HERO ID: 2518980 OQD: High	Tianjin City, CN Scenario: Soil from suburban vegetable soil (n = 13; DF = 1.00; Sampling Period: Nov., 2009)	LOD: Not Reported LOQ: Not Reported	0.000 µg/g	0.358 µg/g	0.054 µg/g (AM)	50th: 0.004 µg/g;	0.108 µg/g (ASD)
Kong et al. 2012 HERO ID: 2518980 OQD: High	Tianjin City, CN Scenario: Soil from suburban orchard (n = 13; DF = 1.00; Sampling Period: Nov., 2009)	LOD: Not Reported LOQ: Not Reported	0.000 µg/g	0.125 µg/g	0.016 µg/g (AM)	50th: 0.001 µg/g;	0.037 µg/g (ASD)
Kong et al. 2012 HERO ID: 2518980 OQD: High	Tianjin City, CN Scenario: Soil from suburban wasteland (n = 7; DF = 1.00; Sampling Period: Nov., 2009)	LOD: Not Reported LOQ: Not Reported	0.000 µg/g	0.471 µg/g	0.106 µg/g (AM)	50th: 0.003 µg/g;	0.173 µg/g (ASD)
Niu et al. 2014 HERO ID: 2519080 OQD: High	31 Provinces, CN Scenario: Soils from agriculture fields in China (n = 123; DF = 0.61; Sampling Period: Apr., 2013 - May, 2013)	LOD: 0.008-0.295 µg/kg LOQ: Not Reported	ND	0.276 µg/kg	0.042 µg/kg (AM)	50th: 0.037 µg/kg;	106 % (CV)
Wu et al. 2015 HERO ID: 2804032 OQD: High	Xiangyang, China, CN Scenario: Surface soil from a residential area near an electronics factory (n = 46; DF = NR; Sampling Period: Dec., 2013)	LOD: 0.02 mg/kg LOQ: Not Reported	0.24 mg/kg	3.93 mg/kg	1.60 mg/kg (AM)	50th: 1.31 mg/kg;	0.80 mg/kg (ASD)

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Wu et al. 2015 HERO ID: 2804032 OQD: High	Xiangyang, China, CN Scenario: Surface soil from the roadside near an electronics factory (n = 33; DF = NR; Sampling Period: Dec., 2013)	LOD: 0.02 mg/kg LOQ: Not Reported	ND	10.04 mg/kg	1.75 mg/kg (AM)	50th: 1.16 mg/kg;	2.15 mg/kg (ASD)
Wu et al. 2015 HERO ID: 2804032 OQD: High	Xiangyang, China, CN Scenario: Surface soil from a farmland near an electronics factory (n = 32; DF = NR; Sampling Period: Dec., 2013)	LOD: 0.02 mg/kg LOQ: Not Reported	0.31	9.26 mg/kg	2.36 mg/kg (AM)	50th: 2.11 mg/kg;	1.82 mg/kg (ASD)
Wu et al. 2015 HERO ID: 2804032 OQD: High	Xiangyang, China, CN Scenario: Surface soil from a non-cultivated field near an electronics factory (n = 31; DF = NR; Sampling Period: Dec., 2013)	LOD: 0.02 mg/kg LOQ: Not Reported	0.23	2.69 mg/kg	1.30 mg/kg (AM)	50th: 1.260 mg/kg;	0.53 mg/kg (ASD)
Wu et al. 2015 HERO ID: 2804032 OQD: High	Xiangyang, China, CN Scenario: Surface soil from a residential area near a non-industrial area (n = 44; DF = NR; Sampling Period: Dec., 2013)	LOD: 0.02 mg/kg LOQ: Not Reported	0.21	12.35 mg/kg	1.25 mg/kg (AM)	50th: 1.03 mg/kg;	1.79 mg/kg (ASD)
Wu et al. 2015 HERO ID: 2804032 OQD: High	Xiangyang, China, CN Scenario: Surface soil from the roadside near a non-industrial area (n = 36; DF = NR; Sampling Period: Dec., 2013)	LOD: 0.02 mg/kg LOQ: Not Reported	0.21	10.23 mg/kg	1.48 mg/kg (AM)	50th: 1.07 mg/kg;	1.66 mg/kg (ASD)
Wu et al. 2015 HERO ID: 2804032 OQD: High	Xiangyang, China, CN Scenario: Surface soil from the farmland near a non-industrial area (n = 32; DF = NR; Sampling Period: Dec., 2013)	LOD: 0.02 mg/kg LOQ: Not Reported	ND	9.16 mg/kg	1.86 mg/kg (AM)	50th: 1.25 mg/kg;	1.70 mg/kg (ASD)
Wu et al. 2015 HERO ID: 2804032 OQD: High	Xiangyang, China, CN Scenario: Surface soil from non-cultivated fields near non-industrial area (n = 33; DF = NR; Sampling Period: Dec., 2013)	LOD: 0.02 mg/kg LOQ: Not Reported	0.23	2.69 mg/kg	1.30 mg/kg (AM)	50th: 1.26 mg/kg;	0.52 mg/kg (ASD)
Zhang et al. 2015 HERO ID: 2804035 OQD: Medium	HeiLongjiang, JiLin, LiaoNing Provinces, CN Scenario: Soil from greenhouse in China (Spring) (n = 27; DF = 1.0; Sampling Period: Spring, 2013)	LOD: 3.13 µg/kg LOQ: Not Reported	0.017	0.139 mg/kg	0.053 mg/kg (AM)	50th: 0.047 mg/kg;	0.0006 mg/kg (ASD)
Zhang et al. 2015 HERO ID: 2804035 OQD: Medium	HeiLongjiang, JiLin, LiaoNing Provinces, CN Scenario: Soil from greenhouse in China (Summer) (n = 27; DF = 1.0; Sampling Period: Summer, 2013)	LOD: 3.13 µg/kg LOQ: Not Reported	0.017	0.083 mg/kg	0.059 mg/kg (AM)	50th: 0.069 mg/kg;	0.0063 mg/kg (ASD)
Zhang et al. 2015 HERO ID: 2804035 OQD: Medium	HeiLongjiang, JiLin, LiaoNing Provinces, CN Scenario: Soil from greenhouse in China (Autumn) (n = 27; DF = 1.0; Sampling Period: Fall, 2013)	LOD: 3.13 µg/kg LOQ: Not Reported	0.022	0.058 mg/kg	0.033 mg/kg (AM)	50th: 0.028 mg/kg;	0.0002 mg/kg (ASD)

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Table 12 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Tran et al. 2015 HERO ID: 2914670 OQD: Medium	Essonne, France, FR Scenario: Forest soil in rural area of Fontenay-les-Briis, horizon sample (0-20cm depth) (n = 1; DF = 0; Sampling Period: Oct., 2010)	LOD: 3.5 pg/g LOQ: Not Reported			POINT VALUE(S): [<LOQ]		
Tran et al. 2015 HERO ID: 2914670 OQD: Medium	Essonne, France, FR Scenario: Rural soil in Doue, horizon sample (0-20cm depth) (n = 1; DF = 1; Sampling Period: Oct., 2010)	LOD: 3.5 pg/g LOQ: Not Reported			POINT VALUE(S): [0.39 µg/kg]		
Tran et al. 2015 HERO ID: 2914670 OQD: Medium	Essonne, France, FR Scenario: Urban soil in Paris, horizon sample (0-20cm depth) (n = 2; DF = 1; Sampling Period: Oct., 2010)	LOD: 3.5 pg/g LOQ: Not Reported	NR	NR	2.6 µg/kg (AM)	NR	NR
Tran et al. 2015 HERO ID: 2914670 OQD: Medium	Essonne, France, FR Scenario: Agricultural soil in rural area of Fontenay-les-Briis, treated with sludge (0-20cm depth) (n = 4; DF = 0; Sampling Period: Mar., 2011 - Sept., 2011)	LOD: 3.5 pg/g LOQ: Not Reported	NR	NR	0 µg/kg (AM)	NR	NR
Tran et al. 2015 HERO ID: 2914670 OQD: Medium	Essonne, France, FR Scenario: Agricultural soil in rural area of Fontenay-les-Briis, treated with sludge (20-40 cm depth) (n = 4; DF = 0; Sampling Period: Mar., 2011 - Sept., 2011)	LOD: 3.5 pg/g LOQ: Not Reported	NR	NR	0 µg/kg (AM)	NR	NR
Tran et al. 2015 HERO ID: 2914670 OQD: Medium	Essonne, France, FR Scenario: Agricultural soil in rural area of Fontenay-les-Briis, treated with sludge (40-60cm depth) (n = 4; DF = 0; Sampling Period: Mar., 2011 - Sept., 2011)	LOD: 3.5 pg/g LOQ: Not Reported	NR	NR	0 µg/kg (AM)	NR	NR
Tran et al. 2015 HERO ID: 2914670 OQD: Medium	Essonne, France, FR Scenario: Agricultural soil in rural area of Fontenay-les-Briis, treated with sludge (60-80cm depth) (n = 4; DF = 0; Sampling Period: Mar., 2011 - Sept., 2011)	LOD: 3.5 pg/g LOQ: Not Reported	NR	NR	0 µg/kg (AM)	NR	NR
Tran et al. 2015 HERO ID: 2914670 OQD: Medium	Doue, FR Scenario: Soil from Doue rural area (n = 1; DF = 1; Sampling Period: 2012)	LOD: 3.5 pg/g LOQ: 56-142 pg/g			Point: 0.39 ng/g		
Tran et al. 2015 HERO ID: 2914670 OQD: Medium	Fontenay-les-Briis, FR Scenario: Soil from Fontenay-les-Briis forest (n = 1; DF = 1; Sampling Period: 2012)	LOD: 3.5 pg/g LOQ: 56-142 pg/g			Point: <LOQ ng/g		
Tran et al. 2015 HERO ID: 2914670 OQD: Medium	Paris, FR Scenario: Soil from Paris urban area (n = 1; DF = 1; Sampling Period: 2012)	LOD: 3.5 pg/g LOQ: 56-142 pg/g			Point: 2.6 ng/g		
Tran et al. 2015 HERO ID: 2914670 OQD: Medium	Fontenay-les-Briis, FR Scenario: Soil from Fontenay-les-Briis agricultural site (n = 1; DF = 1; Sampling Period: 2010 - 2011)	LOD: 3.5 pg/g LOQ: 56-142 pg/g			Point: 1.3 ng/g		

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Butyl benzyl phthalate

Monitoring

Soil

Table 12 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Ma et al. 2015 HERO ID: 3016266 OQD: High	Nanjing, China, CN Scenario: Soil (0~15 cm) from 19 greenhouses in Gu Li village (n = 19; DF = 0.74; Sampling Period: Dec., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	1 µg/kg (AM)	NR	0 µg/kg (ASD)
Ma et al. 2015 HERO ID: 3016266 OQD: High	Nanjing, China, CN Scenario: Soil from 18 greenhouses in Planck farm (n = 18; DF = 0.72; Sampling Period: Dec., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	1 µg/kg (AM)	NR	0 µg/kg (ASD)
Ma et al. 2015 HERO ID: 3016266 OQD: High	Nanjing, China, CN Scenario: Soil (0~15 cm) from 15 greenhouses in Hu Shu village (n = 15; DF = 1; Sampling Period: Dec., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	1 µg/kg (AM)	NR	0 µg/kg (ASD)
Ma et al. 2015 HERO ID: 3016266 OQD: High	Nanjing, China, CN Scenario: Soil from 9 greenhouses in Suo Shi village (n = 9; DF = 1; Sampling Period: Dec., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	1 µg/kg (AM)	NR	0 µg/kg (ASD)
Zhang et al. 2015 HERO ID: 3045478 OQD: Medium	Wangyang River (WYR), Shijiazhuang City, Hebei Province, CN Scenario: Soil (0~20 cm) from 13 sites along the Wangyang River downstream of WWTP discharge (n = 39; DF = 0.51; Sampling Period: Jun., 2013)	LOD: Not Reported LOQ: Not Reported	ND	0.116 µg/L	0.022 µg/L (AM)	50th: 0.029 µg/L;	0.025 µg/L (ASD)
Wang et al. 2015 HERO ID: 3045628 OQD: High	Xianyang, Shaanxi Province, CN Scenario: Soil (0-25 cm) from vegetable fields in Dongzhangcun, a suburb near the urban district (n = 12; DF = NR; Sampling Period: Sept., 2013 - Oct., 2013)	LOD: 6 µg/L LOQ: Not Reported	<LOD	172.12 µg/kg	49.18 µg/kg (AM)	NR	NR
Wang et al. 2015 HERO ID: 3045628 OQD: High	Xianyang, Shaanxi Province, CN Scenario: Soil (0-25 cm) from vegetable fields in Caojiazhai, a suburb (n = 27; DF = NR; Sampling Period: Sept., 2013 - Oct., 2013)	LOD: 6 µg/L LOQ: Not Reported	<LOD	222.00 µg/kg	35.06 µg/kg (AM)	NR	NR
Wang et al. 2015 HERO ID: 3045628 OQD: High	Xianyang, Shaanxi Province, CN Scenario: Soil (0-25 cm) from vegetable fields in Guocun, a heavy traffic suburb nearest from urban district (n = 4; DF = NR; Sampling Period: Sept., 2013 - Oct., 2013)	LOD: 6 µg/L LOQ: Not Reported	35.98 µg/kg	135.65 µg/kg	65.47 µg/kg (AM)	NR	NR
Wang et al. 2015 HERO ID: 3045628 OQD: High	Xianyang, Shaanxi Province, CN Scenario: Soil (0-25 cm) from vegetable fields in Baxingtan, a suburb with heavy traffic (n = 16; DF = NR; Sampling Period: Sept., 2013 - Oct., 2013)	LOD: 6 µg/L LOQ: Not Reported	<LOD	93.47 µg/kg	33.16 µg/kg (AM)	NR	NR
Sun et al. 2015 HERO ID: 3070929 OQD: High	Shanghai City, Jiangsu Province, and Zhejiang Province, CN Scenario: Agriculture soils from Yangtze River Delta (n = 241; DF = 0.93; Sampling Period: Jun., 2014)	LOD: 0.05 - 0.28 ng/g LOQ: Not Reported	ND	12.2 ng/g	1.0 ng/g (AM)	50th: 0.6 ng/g;	NR

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Butyl benzyl phthalate

Monitoring

Soil

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Liu et al. 2016 HERO ID: 3350971 OQD: Medium	Eastern China, CN Scenario: Soil within a chemical industrial park (n = 4; DF = 0.50; Sampling Period: 2016)	LOD: 5 µg/kg LOQ: Not Reported	NR	33 µg/kg	99 µg/kg (AM)	NR	NR
Sun et al. 2016 HERO ID: 3455519 OQD: Medium	Jiangsu Province; Shanghai Municipality, CN Scenario: Topsoil from agriculture fields (n = 26; DF = 0.62; Sampling Period: Nov., 2014)	LOD: 0.20–0.40 ng/g LOQ: Not Reported	ND	78.3 ng/g	11.6 ng/g (AM)	NR	20.6 ng/g (ASD)
Gaspéri et al. 2016 HERO ID: 3985396 OQD: Medium	Paris, FR Scenario: Soil samples from 32 urban and rural areas in Greater Paris (n = 32; DF = NR; Sampling Period: 2009 - 2010)	LOD: Not Reported LOQ: 0.1 µg/kg	2 µg/kg	20 µg/kg	NR	NR	NR
Ibeto et al. 2019 HERO ID: 5119775 OQD: Medium	Awka, South Eastern, NG Scenario: Dry season soil north of automobile workshop village (n = 4; DF = NR; Sampling Period: Feb., 2017)	LOD: 0.001 mg/L LOQ: Not Reported	NR	NR	0.22 mg/kg (AM)	NR	0.01 mg/kg (SE)
Ibeto et al. 2019 HERO ID: 5119775 OQD: Medium	Awka, South Eastern, NG Scenario: Dry season soil south of automobile workshop village (n = 4; DF = NR; Sampling Period: Feb., 2017)	LOD: 0.001 mg/L LOQ: Not Reported	NR	NR	0.18 mg/kg (AM)	NR	0.06 mg/kg (SE)
Ibeto et al. 2019 HERO ID: 5119775 OQD: Medium	Awka, South Eastern, NG Scenario: Dry season soil east of automobile workshop village (n = 4; DF = NR; Sampling Period: Feb., 2017)	LOD: 0.001 mg/L LOQ: Not Reported	NR	NR	0.18 mg/kg (AM)	NR	0.06 mg/kg (SE)
Ibeto et al. 2019 HERO ID: 5119775 OQD: Medium	Awka, South Eastern, NG Scenario: Dry season soil central to automobile workshop village (n = 4; DF = NR; Sampling Period: Feb., 2017)	LOD: 0.001 mg/L LOQ: Not Reported	NR	NR	1.21 mg/kg (AM)	NR	0.37 mg/kg (SE)
Ibeto et al. 2019 HERO ID: 5119775 OQD: Medium	Awka, South Eastern, NG Scenario: Dry season soil 500m from automobile workshop village (n = 4; DF = NR; Sampling Period: Feb., 2017)	LOD: 0.001 mg/L LOQ: Not Reported	NR	NR	0.06 mg/kg (AM)	NR	NR
Ibeto et al. 2019 HERO ID: 5119775 OQD: Medium	Awka, South Eastern, NG Scenario: Dry season soil west of automobile workshop village (n = 4; DF = NR; Sampling Period: Feb., 2017)	LOD: 0.001 mg/L LOQ: Not Reported	NR	NR	0.37 mg/kg (AM)	NR	0.05 mg/kg (SE)
Ibeto et al. 2019 HERO ID: 5119775 OQD: Medium	Awka, South Eastern, NG Scenario: Wet season soil north of automobile workshop village (n = 4; DF = NR; Sampling Period: May, 2017)	LOD: 0.001 mg/L LOQ: Not Reported	NR	NR	0.79 mg/kg (AM)	NR	0.004 mg/kg (SE)

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Ibeto et al. 2019 HERO ID: 5119775 OQD: Medium	Awka, South Eastern, NG Scenario: Wet season soil south of automobile workshop village (n = 4; DF = NR; Sampling Period: May, 2017)	LOD: 0.001 mg/L LOQ: Not Reported	NR	NR	0.79 mg/kg (AM)	NR	0.006 mg/kg (SE)
Ibeto et al. 2019 HERO ID: 5119775 OQD: Medium	Awka, South Eastern, NG Scenario: Wet season soil west of automobile workshop village (n = 4; DF = NR; Sampling Period: May, 2017)	LOD: 0.001 mg/L LOQ: Not Reported	NR	NR	0.75 mg/kg (AM)	NR	0.032 mg/kg (SE)
Ibeto et al. 2019 HERO ID: 5119775 OQD: Medium	Awka, South Eastern, NG Scenario: Wet season soil east of automobile workshop village (n = 4; DF = NR; Sampling Period: May, 2017)	LOD: 0.001 mg/L LOQ: Not Reported	NR	NR	0.90 mg/kg (AM)	NR	0.05 mg/kg (SE)
Ibeto et al. 2019 HERO ID: 5119775 OQD: Medium	Awka, South Eastern, NG Scenario: Wet season soil central to automobile workshop village (n = 4; DF = NR; Sampling Period: May, 2017)	LOD: 0.001 mg/L LOQ: Not Reported	NR	NR	0.90 mg/kg (AM)	NR	0.06 mg/kg (SE)
Ibeto et al. 2019 HERO ID: 5119775 OQD: Medium	Awka, South Eastern, NG Scenario: Wet season soil 500m from automobile workshop village (n = 4; DF = NR; Sampling Period: May, 2017)	LOD: 0.001 mg/L LOQ: Not Reported	NR	NR	0.01 mg/kg (AM)	NR	NR
Sardiña et al. 2019 HERO ID: 5412432 OQD: High	Melbourne; Ballarat; Bendigo; Geelong; Latrobe Valley, AU Scenario: Soil from aquatic ecosystems on various land-use types (n = 25; DF = 0.04; Sampling Period: Aug., 2019)	LOD: 1 mg/kg LOQ: Not Reported	<LOD	1.2 mg/kg	0.53 mg/kg (AM)	NR	0.14 mg/kg (ASD)
Chakraborty et al. 2019 HERO ID: 5433039 OQD: Medium	New Delhi, Kolkata, Mumbai, and Chennai, IN Scenario: Surface soil from open dumpsites (DS) containing e-waste in cities (n = 11; DF = 1; Sampling Period: 2014)	LOD: 0.24 ng/g LOQ: Not Reported	20 ng/g	35 ng/g	23 ng/g (AM)	NR	5 ng/g (ASD)
Chakraborty et al. 2019 HERO ID: 5433039 OQD: Medium	New Delhi, Mumbai, and Chennai, IN Scenario: Surface soil from precious metal recovery sites (EWR) in cities (n = 5; DF = 1; Sampling Period: 2014)	LOD: 0.24 ng/g LOQ: Not Reported	34 ng/g	413 ng/g	140 ng/g (AM)	NR	154 ng/g (ASD)
Chakraborty et al. 2019 HERO ID: 5433039 OQD: Medium	New Delhi, Mumbai, and Chennai, IN Scenario: Surface soil from e-waste dismantling sites (EWD) in cities (n = 5; DF = NR; Sampling Period: 2014)	LOD: 0.24 ng/g LOQ: Not Reported	ND	81 ng/g	29 ng/g (AM)	NR	30 ng/g (ASD)
Chakraborty et al. 2019 HERO ID: 5433039 OQD: Medium	New Delhi, Mumbai, and Chennai, IN Scenario: Surface soil from e-waste shredding sites (EWS) in cities (n = 4; DF = 1; Sampling Period: 2014)	LOD: 0.24 ng/g LOQ: Not Reported	23 ng/g	113 ng/g	54 ng/g (AM)	NR	42 ng/g (ASD)

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Table 12 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Wu et al. 2019 HERO ID: 5433502 OQD: High	Yuyao City, Zhejiang Province, CN Scenario: Soil samples from downwind of a plastic market (n = 21; DF = 1; Sampling Period: May, 2017)	LOD: Not Reported LOQ: 0.08 µg/g	0.8 ng/g	4.6 ng/g	2.0 ng/g (AM)	50th: 1.7 ng/g;	NR
Li et al. 2016 HERO ID: 5540829 OQD: High	Qingdao, Yantai, Weifang, and Weihai, Shandong Peninsula, CN Scenario: Soil from 36 vegetable fields with plastic film mulching (n = 108; DF = 0.19; Sampling Period: May, 2012)	LOD: Not Reported LOQ: 0.002-0.024 mg/kg	0 mg/kg	4.786 mg/kg	0.490 mg/kg (AM)	NR	1.162 mg/kg (ASD)
Zhang et al. 2019 HERO ID: 5541389 OQD: High	Guizhou, Shantou, CN Scenario: Soil in residential area A with e-waste recycling workshops (n = 11; DF = 1; Sampling Period: Mar., 2019)	LOD: 0.16-1.65 µg/L LOQ: Not Reported	NR	NR	71.16 ng/g (AM); 63.22 ng/g (GM)	50th: 60.42 ng/g;	NR
Zhang et al. 2019 HERO ID: 5541389 OQD: High	Guizhou, Shantou, CN Scenario: Soil in residential area B with few to none e-waste recycling workshops (n = 7; DF = 1; Sampling Period: Mar., 2019)	LOD: 0.16-1.65 µg/L LOQ: Not Reported	NR	NR	32.08 ng/g (AM); 17.76 ng/g (GM)	50th: 14.05 ng/g;	NR
Zhang et al. 2019 HERO ID: 5541389 OQD: High	Guizhou, Shantou, CN Scenario: Soil in agricultural area used for rice, fruit and vegetables (n = 28; DF = 1; Sampling Period: Mar., 2019)	LOD: 0.16-1.65 µg/L LOQ: Not Reported	NR	NR	34.83 ng/g (AM); 25.16 ng/g (GM)	50th: 34.80 ng/g;	NR
Rodríguez-Ramos et al. 2019 HERO ID: 5617923 OQD: High	Tenerife, Canary Islands, ES Scenario: Tenerife agricultural soil utilized for cereals (barley and lupin bean) and potato cultivation - A4 (n = 2; DF = 1; Sampling Period: Jul., 2019)	LOD: 0.17 µg/kg LOQ: 0.57 µg/kg	NR	NR	5 µg/kg (AM)	NR	2 µg/kg (ASD)
Rodríguez-Ramos et al. 2019 HERO ID: 5617923 OQD: High	Tenerife, Canary Islands, ES Scenario: Soil/sand taken from beaches in Tenerife (n = 8; DF = 0; Sampling Period: Jul., 2019)	LOD: 0.050 µg/kg LOQ: 0.17 µg/kg	NR	NR	ND	NR	NR
Rodríguez-Ramos et al. 2019 HERO ID: 5617923 OQD: High	Tenerife, Canary Islands, ES Scenario: Tenerife agricultural soil utilized for cereals (barley and lupin bean) and potato cultivation - A1 (n = 2; DF = 1; Sampling Period: Jul., 2019)	LOD: 0.17 µg/kg LOQ: 0.57 µg/kg	NR	NR	5 µg/kg (AM)	NR	2 µg/kg (ASD)
Rodríguez-Ramos et al. 2019 HERO ID: 5617923 OQD: High	Tenerife, Canary Islands, ES Scenario: Tenerife agricultural soil utilized for cereals (barley and lupin bean) and potato cultivation - A2, A3, and A5 (n = 6; DF = 0; Sampling Period: Jul., 2019)	LOD: 0.17 µg/kg LOQ: 0.57 µg/kg	NR	NR	<LOQ	NR	NR

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Monitoring

Soil

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Huang et al. 2019 HERO ID: 5618703 OQD: High	Kaohsiung, Tainan, Pingdong, TW Scenario: Soil from elementary school running track (n = 23; DF = 0.13; Sampling Period: May, 2012 - Apr., 2014)	LOD: 0.11 µg/g LOQ: Not Reported	ND	5.3 µg/g	NR	50th: ND;	NR
Huang et al. 2019 HERO ID: 5618703 OQD: High	Kaohsiung, Tainan, Pingdong, TW Scenario: Soil from kindergarten playground (n = 22; DF = 0; Sampling Period: May, 2012 - Apr., 2014)	LOD: 0.11 µg/g LOQ: Not Reported	ND	29.6 µg/g	NR	50th: ND;	NR
Huang et al. 2019 HERO ID: 5618703 OQD: High	Kaohsiung, Tainan, Pingdong, TW Scenario: Soil outside of kindergarten (n = 17; DF = 0.06; Sampling Period: May, 2012 - Apr., 2014)	LOD: 0.11 µg/g LOQ: Not Reported	ND	1.3 µg/g	NR	50th: ND;	NR
Huang et al. 2019 HERO ID: 5618703 OQD: High	Kaohsiung, Tainan, Pingdong, TW Scenario: Soil outside elementary school (n = 29; DF = 0.07; Sampling Period: May, 2012 - Apr., 2014)	LOD: 0.11 µg/g LOQ: Not Reported	ND	2.7 µg/g	NR	50th: ND;	NR
Huang et al. 2019 HERO ID: 5618703 OQD: High	Kaohsiung, Tainan, Pingdong, TW Scenario: Soil from children's park playground (n = 13; DF = 0; Sampling Period: May, 2012 - Apr., 2014)	LOD: 0.11 µg/g LOQ: Not Reported	ND	349.1 µg/g	NR	50th: ND;	NR
Wei et al. 2020 HERO ID: 6816706 OQD: Medium	Anhui, Jiangsu, Shanghai, and Zhejiang Provinces, Yangtze River Delta, CN Scenario: Agricultural topsoil in China (n = 228; DF = 0.29; Sampling Period: Oct., 2018)	LOD: 0.1 ng/g LOQ: Not Reported	ND	96.3 ng/g	0.861 ng/g (AM)	50th: ND;	NR
Billings et al. 2023 HERO ID: 11785155 OQD: High	Central and Southern England, GB Scenario: Urban parkland from 3 sites in Oxford, away from site boundaries and footpaths (n = 3; DF = NR; Sampling Period: Jan., 2020 - Feb., 2020)	LOD: 3.8 ng/g LOQ: Not Reported	NR	NR	NR	NR	NR
Billings et al. 2023 HERO ID: 11785155 OQD: High	Central and Southern England, GB Scenario: Soil from public land downwind of 6 landfills, as close to perimeter as possible (n = 6; DF = 0.50; Sampling Period: Jan., 2020 - Feb., 2020)	LOD: 3.8 ng/g LOQ: Not Reported	<LOD	10.9 ng/g (AM)	3.3 ng/g (AM)	50th: 2.0 ng/g;	NR
Billings et al. 2023 HERO ID: 11785155 OQD: High	Central and Southern England, GB Scenario: Urban roadside soil from 3 sites in Oxford, from widest point of verge (n = 3; DF = 0.667; Sampling Period: Jan., 2020 - Feb., 2020)	LOD: 3.8 ng/g LOQ: Not Reported	<LOD	20.3 ng/g (AM)	11.8 ng/g (AM)	50th: 15.1 ng/g;	NR
Billings et al. 2023 HERO ID: 11785155 OQD: High	Central and Southern England, GB Scenario: Woodland soil from 7 sites, representing relatively low anthropogenic influences (n = 7; DF = 0.286; Sampling Period: Jan., 2020 - Feb., 2020)	LOD: 3.8 ng/g LOQ: Not Reported	<LOD	7.8 ng/g (AM)	2.0 ng/g (AM)	50th: <LOD;	NR

Table 13: Data Extraction Tables of Exposure Monitoring Studies for Surface Water

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Shi et al. 2012 HERO ID: 1249969 OQD: High	Changzhou, Yangtze River Delta, China, CN Scenario: Yangtze River source water for Changzhou (n = 3; DF = 1; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	350 ng/L (AM)	NR	15 ng/L (ASD)
Shi et al. 2012 HERO ID: 1249969 OQD: High	Suzhou, Yangtze River Delta, China, CN Scenario: Eastern Taihu Lake source water for Suzhou (n = 3; DF = 1; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	290 ng/L (AM)	NR	20 ng/L (ASD)
Shi et al. 2012 HERO ID: 1249969 OQD: High	Wuxi, Yangtze River Delta, China, CN Scenario: Northern Taihu Lake source water for Wuxi (n = 3; DF = 1; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	24 ng/L (AM)	NR	2.7 ng/L (ASD)
Shi et al. 2012 HERO ID: 1249969 OQD: High	Yancheng, Yangtze River Delta, China, CN Scenario: Huaihe River source water for Yancheng (n = 3; DF = 1; Sampling Period: Aug., 2010)	LOD: 0.4 ng/L LOQ: 1.3 ng/L	NR	NR	38 ng/L (AM)	NR	1.2 ng/L (ASD)
Roy F. Weston Inc et al. 1980 HERO ID: 1333014 OQD: Medium	Delaware River, Delaware, US Scenario: Surface water from Delaware River, upstream of chemical facility (n = 2; DF = 1; Sampling Period: Apr., 1979 - Dec., 1979)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [0.5 µg/L; — µg/L]				
Valton et al. 2014 HERO ID: 2347469 OQD: Medium	Île-de-France district, FR Scenario: Surface water from rive Orge (n = 1; DF = NR; Sampling Period: Jun., 2014)	LOD: 2 pg LOQ: 28 ng/L	NR	NR	59 ng/L (AM)	NR	82 ng/L (ASD)
Zhang et al. 2015 HERO ID: 3045478 OQD: Medium	Wangyang River (WYR), Shijiazhuang City, Hebei Province, CN Scenario: River water from 13 sites along the Wangyang River downstream of WWTP discharge (n = 39; DF = 1; Sampling Period: Jun., 2013)	LOD: Not Reported LOQ: Not Reported	0.39 µg/L	3.36 µg/L	1.18 µg/L (AM)	50th: 1.06 µg/L;	0.68 µg/L (ASD)
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Adelaide, South Africa, ZA Scenario: Surface water upstream from Adelaide WWTP (n = 6; DF = 0.83; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	ND	3.64 µg/L	2.23 µg/L (AM)	NR	0.54 µg/L (SE)
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Adelaide, South Africa, ZA Scenario: Surface water downstream from Adelaide WWTP (n = 6; DF = 0.83; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	<LOD	4.96 µg/L	2.34 µg/L (AM)	NR	0.68 µg/L (SE)
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Alice, South Africa, ZA Scenario: Surface water upstream from Alice WWTP (n = 6; DF = 1; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	0.82 µg/L	4.23 µg/L	2.32 µg/L (AM)	NR	0.62 µg/L (SE)
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Alice, South Africa, ZA Scenario: Surface water downstream from Alice WWTP (n = 6; DF = 1; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	0.66 µg/L	7.23 µg/L	2.98 µg/L (AM)	NR	1.19 µg/L (SE)

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Monitoring

Surface Water

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Seymour, South Africa, ZA Scenario: Surface water upstream from Seymour WWTP (n = 6; DF = 0.67; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	ND	9.69 µg/L	3.38 µg/L (AM)	NR	1.74 µg/L (SE)
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Seymour, South Africa, ZA Scenario: Surface water downstream from Seymour WWTP (n = 6; DF = 0.67; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	ND	5.81 µg/L	3.30 µg/L (AM)	NR	1.15 µg/L (SE)
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Water of aquaculture fish ponds in Pearl River Delta - Zhongshan (n = 12; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: Not Reported LOQ: 8 ng/g	NR	NR	0.18 µg/L (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Water of aquaculture fish ponds in Pearl River Delta - Jiangmen (n = 8; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: Not Reported LOQ: 8 ng/g	NR	NR	0.62 µg/L (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Water of aquaculture fish ponds in Pearl River Delta - Nansha (n = 12; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: Not Reported LOQ: 8 ng/g	NR	NR	0.09 µg/L (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Water of aquaculture fish ponds in Pearl River Delta - Shunde (n = 16; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: Not Reported LOQ: 8 ng/g	NR	NR	2.83 µg/L (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Water of aquaculture fish ponds in Pearl River Delta - Huizhou (n = 8; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: Not Reported LOQ: 8 ng/g	NR	NR	0.13 µg/L (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Water of aquaculture fish ponds in Pearl River Delta - Huadu (n = 8; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: Not Reported LOQ: 8 ng/g	NR	NR	0.10 µg/L (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Water of aquaculture fish ponds in Pearl River Delta - Dongguan (n = 8; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: Not Reported LOQ: 8 ng/g	NR	NR	1.19 µg/L (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Water of aquaculture fish ponds in Pearl River Delta - Guangzhou (n = 8; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: Not Reported LOQ: 8 ng/g	NR	NR	0.98 µg/L (AM)	NR	NR

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Table 13 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Cheng et al. 2019 HERO ID: 5043518 OQD: High	Pearl River Delta region, CN Scenario: Water of aquaculture fish ponds in Pearl River Delta - Nansha (n = 8; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: Not Reported LOQ: 8 ng/g	NR	NR	1.39 µg/L (AM)	NR	NR
Lee et al. 2019 HERO ID: 5043593 OQD: High	Pyeongtaek and Asan, Gyeonggi Province, KR Scenario: Lake Air (Gas) affected from industrial complex (n = 4; DF = 0; Sampling Period: Oct., 2016 - Jul., 2017)	LOD: 0.03 ng/m³ LOQ: 0.09 ng/m³	NR	NR	ND	NR	NR
Lee et al. 2019 HERO ID: 5043593 OQD: High	Pyeongtaek and Asan, Gyeonggi Province, KR Scenario: Lake Air (Particulate) affected from industrial complex (n = 4; DF = 0.75; Sampling Period: Oct., 2016 - Jul., 2017)	LOD: 0.02 ng/m³ LOQ: 0.05 ng/m³	ND	0.20 ng/m³	0.09 ng/m³ (AM)	50th: 0.09 ng/m³;	NR
Lee et al. 2019 HERO ID: 5043593 OQD: High	Pyeongtaek and Asan, Gyeonggi Province, KR Scenario: Lake Air (Total) affected from industrial complex (n = 4; DF = NR; Sampling Period: Oct., 2016 - Jul., 2017)	LOD: 0.002 ng/m³ LOQ: 0.033 ng/m³	ND	0.20 ng/m³	0.09 ng/m³ (AM)	50th: 0.08 ng/m³;	NR
Lee et al. 2019 HERO ID: 5043593 OQD: High	Pyeongtaek and Asan, Gyeonggi Province, KR Scenario: Lake Water affected from industrial complex (n = 47; DF = 0; Sampling Period: Oct., 2016 - Jul., 2017)	LOD: 0.02 µg/L LOQ: 0.05 µg/L	NR	NR	ND	NR	NR
Sun et al. 2014 HERO ID: 5188487 OQD: High	Pearl River Delta region, CN Scenario: River water in dry season (n = 12; DF = 1; Sampling Period: Dec., 2008)	LOD: 0.05 ng/L LOQ: Not Reported	0.34 ng/L	48 ng/L	NR	NR	NR
Sun et al. 2014 HERO ID: 5188487 OQD: High	Pearl River Delta region, CN Scenario: River water in wet season (n = 12; DF = 1; Sampling Period: Jul., 2009)	LOD: 0.05 ng/L LOQ: Not Reported	30 ng/L	260 ng/L	NR	NR	NR
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Water from the Yellow Sea in the Blue Economic Zone - Site B12, 05-35m depth (n = 2; DF = 0; Sampling Period: Nov., 2014)	LOD: 0.4-0.32 ng/L LOQ: Not Reported	NR	NR	ND	NR	NR
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Water from Yellow Sea - Site B14, 4-60m depth (n = 5; DF = 0.4; Sampling Period: Nov., 2014)	LOD: 0.4-0.32 ng/L LOQ: Not Reported	POINT VALUE(S): [ND; ND; ND; 0.43 ng/L; 0.45 ng/L]				
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Water from the Yellow Sea - Site B15, 05-62m depth (n = 5; DF = 0.4; Sampling Period: Nov., 2014)	LOD: 0.4-0.32 ng/L LOQ: Not Reported	POINT VALUE(S): [ND; ND; ND; 0.39 ng/L; 0.54 ng/L]				

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Table 13 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Water from the Yellow Sea - Site B18, 3-34m depth (n = 3; DF = 0.336; Sampling Period: Nov., 2014)	LOD: 0.4-0.32 ng/L LOQ: Not Reported			POINT VALUE(S): [0.73 ng/L; ND; ND]		
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Water from the Bonhai Sea - Site B49, 03-19m (n = 3; DF = 0; Sampling Period: Nov., 2014)	LOD: 0.4-0.32 ng/L LOQ: Not Reported	NR	NR	ND	NR	NR
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Water from the Bonhai Sea in the Yellow River Estuary outlet - Site B45, 04-22m depth (n = 2; DF = 0.5; Sampling Period: Nov., 2014)	LOD: 0.4-0.32 ng/L LOQ: Not Reported			POINT VALUE(S): [ND; 3.26 ng/L]		
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Water from Bonhai Sea in the Yellow River Estuary outlet - Site B65, 04-15m depth (n = 3; DF = 0.667; Sampling Period: Nov., 2014)	LOD: 0.4-0.32 ng/L LOQ: Not Reported			POINT VALUE(S): [ND; 2.37 ng/L; 3.62 ng/L]		
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Water from Bonhai Sea in the Yellow River Estuary outlet - Site B68, 03-10m depth (n = 3; DF = 0.667; Sampling Period: Nov., 2014)	LOD: 0.4-0.32 ng/L LOQ: Not Reported			POINT VALUE(S): [ND; 2.78 ng/L; 0.95 ng/L]		
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Water from the Bonhai Sea - Site B71, 03-11m depth (n = 3; DF = 0.667; Sampling Period: Nov., 2014)	LOD: 0.4-0.32 ng/L LOQ: Not Reported			POINT VALUE(S): [1.79 ng/L; ND; 2.31 ng/L]		
Zhang et al. 2018 HERO ID: 5433212 OQD: High	Liaodong Bay; Bohai Bay; Laizhou Bay, shallow sea basin of the central region and Bohai Strait; Yellow Sea, CN Scenario: Water from Haizhou Bay in the Yellow Sea (n = 9; DF = 0.444; Sampling Period: Nov., 2014)	LOD: 0.4-0.32 ng/L LOQ: Not Reported			POINT VALUE(S): [1.07 ng/L; 0.88 ng/L; 0.84 ng/L; 2.76 ng/L; ND; ND; ND; ND; ND]		
Zhang et al. 2018 HERO ID: 5433253 OQD: High	Eastern Coast of China, CN Scenario: Surface water from Changjiang River Estuary and adjacent area (n = 133; DF = 0.4; Sampling Period: Mar., 2015)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	NR	NR
Bigsby et al. 1989 HERO ID: 5449639 OQD: Medium	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

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Zhang et al. 2019 HERO ID: 5933853 <i>OQD:</i> High	East China Sea, CN Scenario: Seawater samples from East China Sea - Autumn (n = 56; DF = 0.6607; Sampling Period: Oct., 2014 - Nov., 2014)	LOD: 0.04-0.32 ng/L LOQ: Not Reported	NR	NR	NR	NR	NR
Zhang et al. 2019 HERO ID: 5933853 <i>OQD:</i> High	East China Sea, CN Scenario: Seawater samples from East China Sea - Spring (n = 98; DF = 0.5918; Sampling Period: Mar., 2017 - Apr., 2017)	LOD: 0.04-0.32 ng/L LOQ: Not Reported	NR	NR	NR	NR	NR
Zhang et al. 2020 HERO ID: 6957439 <i>OQD:</i> Medium	East China Sea, CN Scenario: Seawater samples from East China Sea - Summer (n = 59; DF = 0.9630; Sampling Period: Jul., 2015)	LOD: 0.04-0.32 ng/L LOQ: Not Reported	NR	NR	NR	NR	NR
Zhang et al. 2020 HERO ID: 6957439 <i>OQD:</i> Medium	East China Sea, CN Scenario: Seawater samples from East China Sea - Winter (n = 56; DF = 0.1757; Sampling Period: Feb., 2017)	LOD: 0.04-0.32 ng/L LOQ: Not Reported	NR	NR	NR	NR	NR
Zhang et al. 2020 HERO ID: 6957439 <i>OQD:</i> Medium	East China Sea, CN Scenario: Seawater samples from East China Sea - Spring (n = 51; DF = 0.3239; Sampling Period: May, 2017)	LOD: 0.04-0.32 ng/L LOQ: Not Reported	NR	NR	NR	NR	NR
McConnell et al. 2007 HERO ID: 10365669 [‡] <i>OQD:</i> High <i>MBzP</i>	Strait of Georgia, Vancouver, British Columbia, CA Scenario: Water sampled at mid-ocean depth (3-4m) from False Creek Harbour - MBzP (n = 10; DF = 0; Sampling Period: Jul., 2005 - Sept., 2005)	LOD: 8.8 ng/L LOQ: Not Reported	NR	NR	ND	NR	NR
Blair et al. 2009 HERO ID: 787951 [‡] <i>OQD:</i> Medium <i>MBzP</i>	Vancouver, British Columbia, CA Scenario: Seawater from False Creek, Vancouver (n = 10; DF = 0.90; Sampling Period: May, 2004 - Sept., 2006)	LOD: 0.22 ng/g LOQ: Not Reported	<LOD	6.05 ng/g	NR	NR	NR
Teil et al. 2014 HERO ID: 2149497 <i>OQD:</i> Medium	Roinville, FR Scenario: Surface water from Orge River at Roinville (n = 2; DF = NR; Sampling Period: Sept., 2008)	LOD: 28 pg/L LOQ: Not Reported	NR	NR	0 ng/L (AM)	NR	NR
Teil et al. 2014 HERO ID: 2149497 <i>OQD:</i> Medium	Viry-Chatillon, FR Scenario: Surface water from Orge River at Viry-Chatillon (n = 8; DF = NR; Sampling Period: Oct., 2009)	LOD: 28 pg/L LOQ: Not Reported	NR	NR	59 ng/L (AM)	NR	82 ng/L (ASD)
Teil et al. 2014 HERO ID: 2149497 <i>OQD:</i> Medium	Marnay-sur-Seine, FR Scenario: Surface water from Seine River at Marnay-sur-Seine (n = 8; DF = NR; Sampling Period: Aug., 2009)	LOD: 28 pg/L LOQ: Not Reported	NR	NR	40 ng/L (AM)	NR	5 ng/L (ASD)
Teil et al. 2014 HERO ID: 2149497 <i>OQD:</i> Medium	Epinay-sur-Seine, FR Scenario: Surface water from Seine River at Epinay-sur-Seine (n = 2; DF = NR; Sampling Period: Aug., 2008)	LOD: 28 pg/L LOQ: Not Reported	NR	NR	119 ng/L (AM)	NR	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Teil et al. 2014 HERO ID: 2149497 OQD: Medium	Triel-sur-Seine, FR Scenario: Surface water from Seine River at Triel-sur-Seine (n = 9; DF = NR; Sampling Period: Nov., 2009)	LOD: 28 pg/L LOQ: Not Reported	NR	NR	55 ng/L (AM)	NR	110 ng/L (ASD)
Sánchez-Avila et al. 2013 HERO ID: 2149885 OQD: Medium	Arriluce Harbor (PA), ES Scenario: Estuarine Water at Arriluce Harbor (n = 2; DF = NR; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	9.5 ng/L (AM)	NR	5 ng/L (ASD)
Sánchez-Avila et al. 2013 HERO ID: 2149885 OQD: Medium	Industry Discharge Site (FE), ES Scenario: Estuarine Water at Industry Discharge Site (n = 2; DF = NR; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	8.1 ng/L (AM)	NR	9 ng/L (ASD)
Sánchez-Avila et al. 2013 HERO ID: 2149885 OQD: Medium	Plenzia (PL), ES Scenario: Estuarine Water at Plenzia (n = 2; DF = NR; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.2 ng/L (AM)	NR	1 ng/L (ASD)
Sánchez-Avila et al. 2013 HERO ID: 2149885 OQD: Medium	Santander Harbor (PS), ES Scenario: Estuarine Water at SantanderHarbor (n = 2; DF = NR; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	10 ng/L (AM)	NR	0.8 ng/L (ASD)
Sánchez-Avila et al. 2013 HERO ID: 2149885 OQD: Medium	WWTP Discharge (GA), ES Scenario: Estuarine Water at WWTP Discharge (n = 2; DF = NR; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	30 ng/L (AM)	NR	19 ng/L (ASD)
Sánchez-Avila et al. 2013 HERO ID: 2149885 OQD: Medium	Pasaia Harbor (PP), ES Scenario: Estuarine Water at Pasaia Harbor (n = 2; DF = NR; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	28 ng/L (AM)	NR	14 ng/L (ASD)
Sánchez-Avila et al. 2013 HERO ID: 2149885 OQD: Medium	WWTP 1 effluent (WG), ES Scenario: Estuarine Water at WWTP 1 effluent (n = 2; DF = NR; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	706 ng/L (AM)	NR	159 ng/L (ASD)
Sánchez-Avila et al. 2013 HERO ID: 2149885 OQD: Medium	San Vicente de la Barqueira (SV), ES Scenario: Coastal Water at San Vicente de la Barqueira (n = 2; DF = NR; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.4 ng/L (AM)	NR	2 ng/L (ASD)
Sánchez-Avila et al. 2013 HERO ID: 2149885 OQD: Medium	Virgen del Mar (VM), ES Scenario: Coastal Water at Virgen del Mar (n = 2; DF = NR; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	10 ng/L (AM)	NR	0.8 ng/L (ASD)
Sánchez-Avila et al. 2013 HERO ID: 2149885 OQD: Medium	Peñarrubia (PN), ES Scenario: Coastal Water at Peñarrubia (n = 2; DF = NR; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	1.8 ng/L (AM)	NR	0.9 ng/L (ASD)
Sánchez-Avila et al. 2013 HERO ID: 2149885 OQD: Medium	Urdaibai (UR), ES Scenario: Estuarine water at Urdaibai (n = 2; DF = NR; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	3.1 ng/L (AM)	NR	3 ng/L (ASD)

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Sánchez-Avila et al. 2013 HERO ID: 2149885 OQD: Medium	WWTP 2 effluent (WS), ES Scenario: Estuarine Water at WWTP 2 effluent (n = 2; DF = NR; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	598 ng/L (AM)	NR	343 ng/L (ASD)
Sánchez-Avila et al. 2013 HERO ID: 2149885 OQD: Medium	Berria (BE), ES Scenario: Coastal Water at Berria (n = 2; DF = NR; Sampling Period: 2009)	LOD: Not Reported LOQ: Not Reported	NR	NR	42 ng/L (AM)	NR	39 ng/L (ASD)
Sánchez-Avila et al. 2012 HERO ID: 2150619 OQD: High	Castellón; Valencia, ES Scenario: Coastal Seawater samples (n = 22; DF = 0.86; Sampling Period: Mar., 2009 - Jul., 2009)	LOD: Not Reported LOQ: Not Reported	1.3 ng/L	104 ng/L	19 ng/L (AM)	NR	NR
Mackintosh et al. 2006 HERO ID: 2158899 OQD: High	Vancouver, CA Scenario: Seawater samples (n = 12; DF = 0.92; Sampling Period: 2006)	LOD: 6.6-44 ng/L LOQ: Not Reported	1.89 ng/L	6.41 ng/L	3.48 ng/L (GM)	NR	NR
Mackintosh et al. 2006 HERO ID: 2158899 OQD: High	Vancouver, CA Scenario: Freely Dissolved Seawater samples (n = 12; DF = 0.92; Sampling Period: 2006)	LOD: 6.6-44 ng/L LOQ: Not Reported	0.97 ng/L	3.28 ng/L	1.78 ng/L (GM)	NR	NR
Net et al. 2015 HERO ID: 3012380 OQD: Medium	Zingem, Scheldt basin, BE Scenario: Water from watercourse in the cross-boarder of Northern France-Belgium (n = Not Reported; DF = NR; Sampling Period: Jul., 2014 - Oct., 2014)	LOD: Not Reported LOQ: 0.05 ng/L	NR	NR	1.7 µg/L (AM)	NR	0.8 µg/L (ASD)
Schmidt et al. 2020 HERO ID: 6966453 OQD: High	Rhone River, Arles, FR Scenario: Surface water 15 km downstream from two WWTP effluents (n = 22; DF = 0.55; Sampling Period: May, 2017 - Apr., 2018)	LOD: Not Reported LOQ: 0.09 ng/L	<LOQ	0.6 ng/L	0.5 ng/L (AM)	50th: 0.5 ng/L;	0.1 ng/L (ASD)

[‡] Data extraction results are for metabolite concentrations.

Table 14: Data Extraction Tables of Exposure Monitoring Studies for Wastewater

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Paxéus et al. 1992 HERO ID: 667025 <i>OQD:</i> Medium	Goteborg, SE Scenario: Influent wastewater from Goteborg Regional Sewage Works, 1989 (n = 4; DF = 1; Sampling Period: 1989)	LOD: Not Reported LOQ: Not Reported	NR	NR	1.2 $\mu\text{g/L}$ (AM)	NR	NR
Paxéus et al. 1992 HERO ID: 667025 <i>OQD:</i> Medium	Goteborg, SE Scenario: Influent wastewater from Goteborg Regional Sewage Works, 1990 (n = 4; DF = 1; Sampling Period: 1990)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.0 $\mu\text{g/L}$ (AM)	NR	NR
Paxéus et al. 1992 HERO ID: 667025 <i>OQD:</i> Medium	Goteborg, SE Scenario: Influent wastewater from Goteborg Regional Sewage Works, 1991 (n = 8; DF = 1; Sampling Period: 1991)	LOD: Not Reported LOQ: Not Reported	NR	NR	1.1 $\mu\text{g/L}$ (AM)	NR	NR
Paxéus et al. 1992 HERO ID: 667025 <i>OQD:</i> Medium	Goteborg, SE Scenario: Effluent wastewater from Goteborg Regional Sewage Works, 1989-1991 (n = 7; DF = 0; Sampling Period: 1989 - 1991)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Meng et al. 2014 HERO ID: 2345986 <i>OQD:</i> Medium	Shanghai, East China, CN Scenario: Final sewage sludge from WWTPs in a highly urbanized city in East China (n = 25; DF = 0.88; Sampling Period: Jun., 2010 - Oct., 2010)	LOD: 1.0 pg LOQ: 2 pg/g	ND	1.4 $\mu\text{g/g}$ (AM)	0.14 $\mu\text{g/g}$ (AM)	50th: 0.011 $\mu\text{g/g}$	NR
Tran et al. 2014 HERO ID: 2519056 <i>OQD:</i> Medium	Essonne, FR Scenario: WWTP influent water from Charmoise River (n = 48; DF = NR; Sampling Period: Feb., 2010 - Feb., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	4.0 $\mu\text{g/L}$ (GM)	NR	3.4 $\mu\text{g/L}$ (GSD)
Tran et al. 2014 HERO ID: 2519056 <i>OQD:</i> Medium	Essonne, FR Scenario: WWTP effluent water into Charmoise River (n = 48; DF = NR; Sampling Period: Feb., 2010 - Feb., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	0.16 $\mu\text{g/L}$ (GM)	NR	0.15 $\mu\text{g/L}$ (GSD)
Tran et al. 2015 HERO ID: 2914670 <i>OQD:</i> Medium	Essonne, France, FR Scenario: Sewage sludge from the WWTP of Fontenay-les-Briis (n = 4; DF = NR; Sampling Period: 2010 - 2011)	LOD: 3.5 pg/g LOQ: Not Reported	NR	NR	0.123 $\mu\text{g/kg}$ (AM)	NR	0.060 $\mu\text{g/kg}$ (ASD)
Liu et al. 2016 HERO ID: 3350971 <i>OQD:</i> Medium	Eastern China, CN Scenario: Wastewater from a chemical industrial park (n = 7; DF = 0; Sampling Period: 2016)	LOD: 0.001 $\mu\text{g/L}$ LOQ: Not Reported	NR	NR	ND	NR	NR
González-Mariño et al. 2017 HERO ID: 3859087 [‡] <i>OQD:</i> High <i>MBzP</i>	Ares, Spain, ES Scenario: 24 h influent wastewater from Ares WWTP (n = 1; DF = 1; Sampling Period: Apr., 2016 - Jun., 2016)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [12 ng/L]				

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
González-Mariño et al. 2017 HERO ID: 3859087 [‡] <i>OQD:</i> High <i>MBzP</i>	Ares, Spain, ES Scenario: 24 h effluent wastewater from Ares WWTP (n = 1; DF = 0; Sampling Period: Apr., 2016 - Jun., 2016)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
González-Mariño et al. 2017 HERO ID: 3859087 [‡] <i>OQD:</i> High <i>MBzP</i>	Baiona, Spain, ES Scenario: 24 h influent wastewater from Baiona WWTP (n = 1; DF = 1; Sampling Period: Apr., 2016 - Jun., 2016)	LOD: Not Reported LOQ: Not Reported		POINT VALUE(S): [10 ng/L]			
González-Mariño et al. 2017 HERO ID: 3859087 [‡] <i>OQD:</i> High <i>MBzP</i>	Baiona, Spain, ES Scenario: 24 h effluent wastewater from Baiona WWTP (n = 1; DF = 0; Sampling Period: Apr., 2016 - Jun., 2016)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
González-Mariño et al. 2017 HERO ID: 3859087 [‡] <i>OQD:</i> High <i>MBzP</i>	Cambados, Spain, ES Scenario: 24 h influent wastewater from Cambados WWTP (n = 1; DF = 1; Sampling Period: Apr., 2016 - Jun., 2016)	LOD: Not Reported LOQ: Not Reported		POINT VALUE(S): [19 ng/L]			
González-Mariño et al. 2017 HERO ID: 3859087 [‡] <i>OQD:</i> High <i>MBzP</i>	Cambados, Spain, ES Scenario: 24 h effluent wastewater from Cambados WWTP (n = 1; DF = 0; Sampling Period: Apr., 2016 - Jun., 2016)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
González-Mariño et al. 2017 HERO ID: 3859087 [‡] <i>OQD:</i> High <i>MBzP</i>	Gondomar, Spain, ES Scenario: 24 h influent wastewater from Gondomar WWTP (n = 1; DF = 1; Sampling Period: Apr., 2016 - Jun., 2016)	LOD: Not Reported LOQ: Not Reported		POINT VALUE(S): [1 ng/L]			
González-Mariño et al. 2017 HERO ID: 3859087 [‡] <i>OQD:</i> High <i>MBzP</i>	Gondomar, Spain, ES Scenario: 24 h effluent wastewater from Gondomar WWTP (n = 1; DF = 0; Sampling Period: Apr., 2016 - Jun., 2016)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
González-Mariño et al. 2017 HERO ID: 3859087 [‡] <i>OQD:</i> High <i>MBzP</i>	Nigran, Spain, ES Scenario: 24 h influent wastewater from Nigran WWTP (n = 1; DF = 0; Sampling Period: Apr., 2016 - Jun., 2016)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
González-Mariño et al. 2017 HERO ID: 3859087 [‡] <i>OQD:</i> High <i>MBzP</i>	Nigran, Spain, ES Scenario: 24 h effluent wastewater from Nigran WWTP (n = 1; DF = 0; Sampling Period: Apr., 2016 - Jun., 2016)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
González-Mariño et al. 2017 HERO ID: 3859087 [‡] <i>OQD:</i> High <i>MBzP</i>	Santiago, Spain, ES Scenario: Grab effluent wastewater from Santiago WWTP (n = 1; DF = 0; Sampling Period: Apr., 2016 - Jun., 2016)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
González-Mariño et al. 2017 HERO ID: 3859087 [‡] <i>OQD:</i> High <i>MBzP</i>	Santiago, Spain, ES Scenario: Grab influent wastewater from Santiago WWTP (n = 2; DF = 1; Sampling Period: Apr., 2016 - Jun., 2016)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [11 ng/L; 14 ng/L]				
González-Mariño et al. 2017 HERO ID: 3859087 [‡] <i>OQD:</i> High <i>MBzP</i>	Santiago, Spain, ES Scenario: 24 h influent wastewater from Santiago WWTP (n = 7; DF = 1; Sampling Period: Apr., 2016 - Jun., 2016)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [12 ng/L; 12 ng/L; 14 ng/L; 12 ng/L; 9 ng/L; 12 ng/L; 14 ng/L]				
Olofsson et al. 2013 HERO ID: 4182871 <i>OQD:</i> Medium	Stockholm, SE Scenario: STP A sludge, mix of industrial sewage (n = 3; DF = 0; Sampling Period: Fall, 2004)	LOD: 0.15 mg/kg LOQ: Not Reported	NR	NR	<LOD	NR	NR
Olofsson et al. 2013 HERO ID: 4182871 <i>OQD:</i> Medium	Gothenburg, SE Scenario: STP B sludge, mix of industrial sewage (n = 3; DF = 0; Sampling Period: Fall, 2004)	LOD: 0.14 mg/kg LOQ: Not Reported	NR	NR	<LOD	NR	NR
Olofsson et al. 2013 HERO ID: 4182871 <i>OQD:</i> Medium	Eslöv, SE Scenario: STP C sludge, food industry sewage (n = 3; DF = 0; Sampling Period: Fall, 2004)	LOD: 0.22 mg/kg LOQ: Not Reported	NR	NR	<LOD	NR	NR
Olofsson et al. 2013 HERO ID: 4182871 <i>OQD:</i> Medium	Umeå, SE Scenario: STP D sludge, hospital sewage (n = 3; DF = 0; Sampling Period: Fall, 2004)	LOD: 0.13 mg/kg LOQ: Not Reported	NR	NR	<LOD	NR	NR
Olofsson et al. 2013 HERO ID: 4182871 <i>OQD:</i> Medium	Borås, SE Scenario: STP E sludge, hospital/textile/chemical industry sewage (n = 3; DF = 0; Sampling Period: Fall, 2004)	LOD: 0.2 mg/kg LOQ: Not Reported	NR	NR	<LOD	NR	NR
Olofsson et al. 2013 HERO ID: 4182871 <i>OQD:</i> Medium	Alingsås, SE Scenario: STP F sludge, laundry industry sewage (n = 3; DF = 0; Sampling Period: Fall, 2004)	LOD: 0.94 mg/kg LOQ: Not Reported	NR	NR	<LOD	NR	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Olofsson et al. 2013 HERO ID: 4182871 OQD: Medium	Floda, SE Scenario: STP G sludge, household sewage (n = 3; DF = 0; Sampling Period: Fall, 2004)	LOD: 1.36 mg/kg LOQ: Not Reported	NR	NR	<LOD	NR	NR
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Adelaide, South Africa, ZA Scenario: Influent from Adelaide WWTP (n = 6; DF = 1; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	2.38	80.70	33.71	NR	13.76 µg/L (SE)
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Adelaide, South Africa, ZA Scenario: Effluent from Adelaide WWTP (n = 6; DF = 0.83; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	<LOD	13.73	5.10	NR	0.71 µg/L (SE)
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Adelaide, South Africa, ZA Scenario: Sludge from Adelaide WWTP (n = 6; DF = 1; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	25.96	126.76	76.36	NR	29.10 µg/L (SE)
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Alice, South Africa, ZA Scenario: Influent from Alice WWTP (n = 6; DF = 0.83; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	<LOD	52.12	27.57	NR	9.22 µg/L (SE)
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Alice, South Africa, ZA Scenario: Effluent from Alice WWTP (n = 6; DF = 1; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	0.75	8.75	3.52	NR	1.33 µg/L (SE)
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Alice, South Africa, ZA Scenario: Sludge from Alice WWTP (n = 6; DF = 1; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	276.91	621.81	449.36	NR	99.56 µg/L (SE)
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Seymour, South Africa, ZA Scenario: Influent from Seymour WWTP (n = 6; DF = 1; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	1.73	14.32	7.21	NR	1.74 µg/L (SE)
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Seymour, South Africa, ZA Scenario: Sludge from Seymour WWTP (n = 6; DF = 1; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	338.21	440.74	383.00	NR	21.42 µg/L (SE)
Salaudeen et al. 2018 HERO ID: 4728386 OQD: High	Seymour, South Africa, ZA Scenario: Effluent from Seymour WWTP (n = 6; DF = 0.75; Sampling Period: Feb., 2016 - Jul., 2016)	LOD: 1.01 µg/L LOQ: 1.75-3.99 µg/L	0.76	13.84	4.14	NR	0.35 µg/L (SE)
Wu et al. 2019 HERO ID: 5442818 OQD: High	Qingdao, China, CN Scenario: Influent wastewater from Chengyang WWTP in a coastal city of China (n = 57; DF = 1; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	3.98 ng/mL	4.76 ng/mL	4.37 ng/mL	NR	NR
Wu et al. 2019 HERO ID: 5442818 OQD: High	Qingdao, China, CN Scenario: Influent wastewater from Licun WWTP in a coastal city of China (n = 57; DF = 1; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	8.96 ng/mL	9.48 ng/mL	9.19 ng/mL	NR	NR

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Table 14 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Wu et al. 2019 HERO ID: 5442818 OQD: High	Qingdao, China, CN Scenario: Influent wastewater from Haibo River WWTP in a coastal city of China (n = 57; DF = 0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Wu et al. 2019 HERO ID: 5442818 OQD: High	Qingdao, China, CN Scenario: Effluent wastewater from Chengyang WWTP in a coastal city of China (n = 57; DF = 1; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	1.14 ng/mL (AM)	NR	NR
Wu et al. 2019 HERO ID: 5442818 OQD: High	Qingdao, China, CN Scenario: Effluent wastewater from Licun WWTP in a coastal city of China (n = 57; DF = 1; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	2.31 ng/mL (AM)	NR	NR
Wu et al. 2019 HERO ID: 5442818 OQD: High	Qingdao, China, CN Scenario: Effluent wastewater from Haibo River WWTP in a coastal city of China (n = 57; DF = 0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Wu et al. 2019 HERO ID: 5442818 OQD: High	Qingdao, China, CN Scenario: Sludge from Chengyang WWTP in a coastal city of China (n = 9; DF = 0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Wu et al. 2019 HERO ID: 5442818 OQD: High	Qingdao, China, CN Scenario: Sludge from Licun WWTP in a coastal city of China (n = 9; DF = 0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Wu et al. 2019 HERO ID: 5442818 OQD: High	Qingdao, China, CN Scenario: Sludge from Haibo River WWTP in a coastal city of China (n = 9; DF = 1; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	16.69 ng/mL (AM)	NR	3.26 ng/mL (ASD)
Wilk et al. 2019 HERO ID: 5709835 OQD: Medium	Pomerania region and Gdynia, PL Scenario: Raw wastewater from Cruise Ships and Ferries (RMT-WW) (n = 10; DF = 0; Sampling Period: Apr., 2015 - Oct., 2016)	LOD: 0.3 µg/L LOQ: 1.00 µg/L	NR	NR	<LOD	NR	NR
Wilk et al. 2019 HERO ID: 5709835 OQD: Medium	Pomerania region and Gdynia, PL Scenario: Pretreated wastewater from Cruise Ships and Ferries (PMT-WW) (n = 10; DF = 0; Sampling Period: Apr., 2015 - Oct., 2016)	LOD: 0.3 µg/L LOQ: 1.00 µg/L	NR	NR	<LOD	NR	NR
Wilk et al. 2019 HERO ID: 5709835 OQD: Medium	Pomerania region and Gdynia, PL Scenario: Inflow of a municipal WWTP (n = 6; DF = 0; Sampling Period: Jan., 2015 - Dec., 2016)	LOD: 0.3 µg/L LOQ: 1.00 µg/L	NR	NR	<LOD	NR	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Lorraine et al. 2006 HERO ID: 5743010 OQD: Medium	San Diego County, CA, US Scenario: Reclaimed wastewater for nonpotable use (WWRP effluent) (n = 6; DF = 0.17; Sampling Period: Sept., 2001 - Jun., 2002)	LOD: 0.26 µg/L LOQ: Not Reported	NR	NR	0.651 µg/L (AM)	NR	NR
Lee et al. 2019 HERO ID: 6959335 OQD: High	KR Scenario: Effluent sludge from WWTPs receiving domestic waste (n = 16; DF = 1; Sampling Period: Jul., 2011 - Oct., 2011)	LOD: 7.321 ng/g LOQ: Not Reported	63 ng/g	150 ng/g	95 ng/g (AM)	NR	NR
Lee et al. 2019 HERO ID: 6959335 OQD: High	KR Scenario: Effluent sludge from WWTPs receiving mixed (industrial and domestic) waste (n = 9; DF = 1; Sampling Period: Jul., 2011 - Oct., 2011)	LOD: 7.321 ng/g LOQ: Not Reported	66 ng/g	110 ng/g	92 ng/g (AM)	NR	NR
Lee et al. 2019 HERO ID: 6959335 OQD: High	KR Scenario: Effluent sludge from WWTPs receiving industrial waste (n = 15; DF = 0.33; Sampling Period: Jul., 2011 - Oct., 2011)	LOD: 7.321 ng/g LOQ: Not Reported	ND	1900 ng/g	170 ng/g (AM)	NR	NR
Dong et al. 2020 HERO ID: 7976582 OQD: Medium	Southwest, TW Scenario: Sludge from seven WWTP in Taiwan (n = 7; DF = 0.143; Sampling Period: 2020)	LOD: 0.011 mg/kg LOQ: Not Reported	POINT VALUE(S): [<LOD; <LOD; <LOD; <LOD; 0.185 mg/kg; <LOD; <LOD]				
WSDE et al. 2022 HERO ID: 11505405 OQD: Medium	Puget Sound region, WA, US Scenario: Pretreated food processing wastewaters that are received by POTWs (n = 1; DF = NR; Sampling Period: Jan., 2021 - Apr., 2021)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [ND µg/L]				
WSDE et al. 2022 HERO ID: 11505405 OQD: Medium	Puget Sound region, WA, US Scenario: Pretreated metal finishing wastewaters that are received by POTWs (n = 1; DF = NR; Sampling Period: Jan., 2021 - Apr., 2021)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [ND µg/L; ND µg/L]				
WSDE et al. 2022 HERO ID: 11505405 OQD: Medium	Puget Sound region, WA, US Scenario: Pretreated steel foundry wastewaters that are received by POTWs (n = 1; DF = NR; Sampling Period: Jan., 2021 - Apr., 2021)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [ND µg/L]				
WSDE et al. 2022 HERO ID: 11505405 OQD: Medium	Puget Sound region, WA, US Scenario: Pretreated aerospace/aircraft modification wastewaters that are received by POTWs (n = 1; DF = NR; Sampling Period: Jan., 2021 - Apr., 2021)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [ND µg/L; ND µg/L]				
WSDE et al. 2022 HERO ID: 11505405 OQD: Medium	Puget Sound region, WA, US Scenario: Pretreated landfill wastewaters that are received by POTWs (n = 1; DF = NR; Sampling Period: Jan., 2021 - Apr., 2021)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [ND µg/L]				

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Table 14 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
WSDE et al. 2022 HERO ID: 11505405 OQD: Medium	Puget Sound region, WA, US Scenario: Pretreated industrial laundry wastewaters that are received by POTWs (n = 1; DF = NR; Sampling Period: Jan., 2021 - Apr., 2021)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [32.967 µg/L]		
WSDE et al. 2022 HERO ID: 11505405 OQD: Medium	Puget Sound region, WA, US Scenario: Pretreated ship building and repair wastewaters that are received by POTWs (n = 1; DF = NR; Sampling Period: Jan., 2021 - Apr., 2021)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [0.455 µg/L]		
Wang et al. 2022 HERO ID: 11784627 OQD: Medium	Western region, TW Scenario: Sludge from 3 water treatment plants (WTP) receiving surface water (n = 3; DF = 0; Sampling Period: 2022)	LOD: 4.33 µg/kg LOQ: Not Reported	NR	NR	<LOD	NR	NR
Wang et al. 2022 HERO ID: 11784627 OQD: Medium	Western region, TW Scenario: Sludge from 8 sewage treatment plants (STP) receiving domestic wastewater (n = 8; DF = 0.37; Sampling Period: 2022)	LOD: 4.33 µg/kg LOQ: Not Reported			POINT VALUE(S): [171 µg/kg; <LOD; <LOD; <LOD; <LOD; <LOD; 599 µg/kg; 499 µg/kg]		
Wang et al. 2022 HERO ID: 11784627 OQD: Medium	Western region, TW Scenario: Sludge from 6 industrial waste treatment plants (ITP) receiving wastewater from various industries (n = 6; DF = 0.83; Sampling Period: 2022)	LOD: 4.33 µg/kg LOQ: Not Reported			POINT VALUE(S): [746 µg/kg; 868 µg/kg; 375 µg/kg; <LOD; 377 µg/kg; 942 µg/kg]		
Sanchez-Avila et al. 2009 HERO ID: 547906 OQD: High	Maresme, Catalonia, ES Scenario: Wastewater (raw influent) (n = 6; DF = NR; Sampling Period: Nov., 2007)	LOD: 18.0 ng/L LOQ: Not Reported	NR	NR	0.67 µg/L (AM)	NR	0.8 µg/L (ASD)
Sanchez-Avila et al. 2009 HERO ID: 547906 OQD: High	Maresme, Catalonia, ES Scenario: Wastewater (treated effluent) (n = 6; DF = NR; Sampling Period: Nov., 2007)	LOD: 18.0 ng/L LOQ: Not Reported	NR	NR	0.01 µg/L (AM)	NR	0.03 µg/L (ASD)
Dargnat et al. 2009 HERO ID: 1322123 OQD: High	Seine River Estuary, FR Scenario: Wastewater discharges from three WWTPs into the Seine estuary. (n = 3; DF = 1; Sampling Period: Jul., 2006)	LOD: 36.0 ng/L LOQ: Not Reported	221 ng/L	727 ng/L	476.7 ng/L (AM)	50th: 482 ng/L;	NR
Jackson et al. 2008 HERO ID: 1408465 OQD: Medium	Eastern shore of San Francisco Bay, US Scenario: Residential wastewater (n = 2; DF = 1; Sampling Period: Aug., 2006 - Nov., 2006)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [0.76 µg/L; 1 µg/L]		
Jackson et al. 2008 HERO ID: 1408465 OQD: Medium	Eastern shore of San Francisco Bay, US Scenario: Nail salon wastewater (n = 1; DF = 1; Sampling Period: Aug., 2006 - Nov., 2006)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [0.74 µg/L]		
Jackson et al. 2008 HERO ID: 1408465 OQD: Medium	Eastern shore of San Francisco Bay, US Scenario: Industrial laundry wastewater (n = 2; DF = 0.5; Sampling Period: Aug., 2006 - Nov., 2006)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [95 µg/L; ND]		

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Table 14 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Jackson et al. 2008 HERO ID: 1408465 <i>OQD:</i> Medium	Eastern shore of San Francisco Bay, US Scenario: Diaper service/coin laundry wastewater (n = 2; DF = 0.5; Sampling Period: Aug., 2006 - Nov., 2006)	LOD: 1.4 µg/L LOQ: Not Reported			POINT VALUE(S): [0.2 µg/L; ND]		
Jackson et al. 2008 HERO ID: 1408465 <i>OQD:</i> Medium	Eastern shore of San Francisco Bay, US Scenario: Pet wash/Veterinary clinic wastewater (n = 2; DF = 0.5; Sampling Period: Aug., 2006 - Nov., 2006)	LOD: 7.1 µg/L LOQ: Not Reported			POINT VALUE(S): [2.3 µg/L; ND]		
Jackson et al. 2008 HERO ID: 1408465 <i>OQD:</i> Medium	Eastern shore of San Francisco Bay, US Scenario: Hospital/Medical clinic wastewater (n = 2; DF = 1; Sampling Period: Aug., 2006 - Nov., 2006)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [0.82 µg/L; 0.74 µg/L]		
Jackson et al. 2008 HERO ID: 1408465 <i>OQD:</i> Medium	Eastern shore of San Francisco Bay, US Scenario: Manufacturers wastewater (pharmaceutical, plastic bag, paper products, beverage, and adhesives) (n = 5; DF = 0.8; Sampling Period: Aug., 2006 - Nov., 2006)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [0.27 µg/L; 2.3 µg/L; 0.14 µg/L; 39 µg/L; ND]		
Jackson et al. 2008 HERO ID: 1408465 <i>OQD:</i> Medium	Eastern shore of San Francisco Bay, US Scenario: Pre-treatment WWTP Influent (n = 2; DF = 1; Sampling Period: Aug., 2006 - Nov., 2006)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [1.9 µg/L; 14 µg/L]		
Jackson et al. 2008 HERO ID: 1408465 <i>OQD:</i> Medium	Eastern shore of San Francisco Bay, US Scenario: WWTP Effluent (n = 3; DF = 0.666; Sampling Period: Aug., 2006 - Nov., 2006)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [0.74 µg/L; 0.84 µg/L; ND]		

[‡] Data extraction results are for metabolite concentrations.

Table 15: Data Extraction Tables of Exposure Experimental Studies for Consumer Products

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Tsumura et al. 2001 HERO ID: 683035 OQD: Medium	JP (Testing Location) Scenario: Measured concentration in fabric (medium hard type) PVC gloves (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [27.9 mg/g; 2.8 %]		
Tsumura et al. 2001 HERO ID: 683035 OQD: Medium	JP (Testing Location) Scenario: Measured concentration in fabric (soft type) PVC gloves (n = 1; DF = 0)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [<LOD]		
Tsumura et al. 2001 HERO ID: 683035 OQD: Medium	JP (Testing Location) Scenario: Measured concentration in market (soft type) PVC gloves (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [0.9 mg/g]		
Ionas et al. 2014 HERO ID: 2345985 OQD: High	Cities and Regions NR, CN,HK,IT,KR,NL,ES,TH,US (Product source) Scenario: Measured concentration in hard plastic children's toys (n = 25; DF = 0.52)	LOD: Not Reported LOQ: Not Reported	NR	<LOQ	<LOQ	50th: <LOQ;	NR
Ionas et al. 2014 HERO ID: 2345985 OQD: High	Cities and Regions NR, CN,HK,IT,KR,NL,ES,TH,US (Product source) Scenario: Measured concentration in soft plastic and rubber children's toys (n = 16; DF = 0.75)	LOD: Not Reported LOQ: Not Reported	NR	<LOQ	<LOQ	50th: <LOQ;	NR
Ionas et al. 2014 HERO ID: 2345985 OQD: High	Cities and Regions NR, CN,HK,IT,KR,NL,ES,TH,US (Product source) Scenario: Measured concentration in wood children's toys (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported	NR	<LOQ	<LOQ	50th: <LOQ;	NR
Ionas et al. 2014 HERO ID: 2345985 OQD: High	Cities and Regions NR, CN,HK,IT,KR,NL,ES,TH,US (Product source) Scenario: Measured concentration in foam and textile children's toys (n = 8; DF = 0.88)	LOD: Not Reported LOQ: Not Reported	NR	<LOQ	<LOQ	50th: <LOQ;	NR

Butyl benzyl phthalate

Modeling

Dust (Indoor)

Table 16: Data Extraction Tables of Exposure Modeling Studies for Dust (Indoor)

Citation Information	Site and Data Description	Min	Max	Mean	Percentile	Variance
Valazquez-Gomez et al. 2019 HERO ID: 5043338 OQD: High	Barcelona, ES (Modeled Location) Scenario: Modeled toddler daily intake from median dust ingestion	NR	NR	NR	50th: 6.53 ng/kg/day; 95th: 24.8 ng/kg/day;	NR
Valazquez-Gomez et al. 2019 HERO ID: 5043338 OQD: High	Barcelona, ES (Modeled Location) Scenario: Modeled teenager daily intake from median dust ingestion	NR	NR	NR	50th: 0.533 ng/kg/day; 95th: 1.78 ng/kg/day;	NR
Valazquez-Gomez et al. 2019 HERO ID: 5043338 OQD: High	Barcelona, ES (Modeled Location) Scenario: Modeled toddler daily intake from high dust ingestion	NR	NR	NR	50th: 26.2 ng/kg/day; 95th: 99.1 ng/kg/day;	NR
Valazquez-Gomez et al. 2019 HERO ID: 5043338 OQD: High	Barcelona, ES (Modeled Location) Scenario: Modeled teenager daily intake from high dust ingestion	NR	NR	NR	50th: 1.33 ng/kg/day; 95th: 4.46 ng/kg/day;	NR
Giovanoulis et al. 2019 HERO ID: 5412073 OQD: Medium	Stockholm, SE (Modeled Location) Scenario: Modeled daily exposure dose for preschoolers from dust ingestion, intermediate exposure	NR	NR	19.3 ng/kg bw/day (AM)	50th: 13.4 ng/kg bw/day; 95th: 46.0 ng/kg bw/day;	NR
Giovanoulis et al. 2019 HERO ID: 5412073 OQD: Medium	Stockholm, SE (Modeled Location) Scenario: Modeled daily exposure dose for preschoolers from dust ingestion, high exposure	NR	NR	32.2 ng/kg bw/day (AM)	50th: 22.4 ng/kg bw/day; 95th: 76.7 ng/kg bw/day;	NR
Luongo et al. 2016 HERO ID: 5469670 OQD: Medium	Stockholm, SE (Modeled Location) Scenario: Modeled adult oral dose during average dust intake using median concentrations	POINT VALUE(S): [3.2 ng/kg bw/day]				
Luongo et al. 2016 HERO ID: 5469670 OQD: Medium	Stockholm, SE (Modeled Location) Scenario: Modeled adult oral dose during high dust intake using median concentrations	POINT VALUE(S): [8.0 ng/kg bw/day]				
Luongo et al. 2016 HERO ID: 5469670 OQD: Medium	Stockholm, SE (Modeled Location) Scenario: Modeled adult oral dose during high dust intake using 95th percentile concentrations	POINT VALUE(S): [55 ng/kg bw/day]				
Luongo et al. 2016 HERO ID: 5469670 OQD: Medium	Stockholm, SE (Modeled Location) Scenario: Modeled toddler oral dose during average dust intake using median concentrations	POINT VALUE(S): [66 ng/kg bw/day]				
Luongo et al. 2016 HERO ID: 5469670 OQD: Medium	Stockholm, SE (Modeled Location) Scenario: Modeled toddler oral dose during high dust intake using median concentrations	POINT VALUE(S): [264 ng/kg bw/day]				

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Butyl benzyl phthalate

Modeling

Dust (Indoor)

Table 16 – continued from previous page

Citation Information	Site and Data Description	Min	Max	Mean	Percentile	Variance
Luongo et al. 2016 HERO ID: 5469670 <i>OQD:</i> Medium	Stockholm, SE (Modeled Location) Scenario: Modeled toddler oral dose during high dust intake using 95th percentile concentrations			POINT VALUE(S): [1815 ng/kg bw/day]		

Table 17: Data Extraction Tables of Exposure Modeling Studies for Indoor Air

Citation Information	Site and Data Description	Min	Max	Mean	Percentile	Variance
Shin et al. 2014 HERO ID: 2215665 <i>OQD:</i> Medium	Northern CA, Northeast MD, Southeast PA, US (Product Source) Scenario: Modeled Emission Rates of SVOCs in a whole house from indoor surfaces	-2.343 log10 mg/day	1.446 log10 mg/day	NR	25th: -0.900 log10 mg/day; 50th: -0.406 log10 mg/day; 75th: 0.073 log10 mg/day;	NR
Luongo et al. 2016 HERO ID: 5469670 <i>OQD:</i> Medium	Stockholm, SE (Modeled Location) Scenario: Modeled adult inhalation dose during average air intake using median concentrations				POINT VALUE(S): [1.5 ng/kg bw/day]	
Luongo et al. 2016 HERO ID: 5469670 <i>OQD:</i> Medium	Stockholm, SE (Modeled Location) Scenario: Modeled adult inhalation dose during high air intake using 95th percentile concentrations				POINT VALUE(S): [11 ng/kg bw/day]	
Luongo et al. 2016 HERO ID: 5469670 <i>OQD:</i> Medium	Stockholm, SE (Modeled Location) Scenario: Modeled toddler inhalation dose during average air intake using median concentrations				POINT VALUE(S): [6 ng/kg bw/day]	
Luongo et al. 2016 HERO ID: 5469670 <i>OQD:</i> Medium	Stockholm, SE (Modeled Location) Scenario: Modeled toddler inhalation dose during high air intake using 95th percentile concentrations				POINT VALUE(S): [45 ng/kg bw/day]	

Butyl benzyl phthalate

Modeling

Product/Article

Table 18: Data Extraction Tables of Exposure Modeling Studies for Product/Article

Citation Information	Site and Data Description	Min	Max	Mean	Percentile	Variance
Shin et al. 2014 HERO ID: 2215665 OQD: Medium	Northern CA, Northeast MD, Southeast PA, US (Product Source) Scenario: Modeled Emission Rates of SVOCs from indoor building materials	NR	NR	1.755 log10 mg/day (AM)	NR	NR

Glossary of Select Terms for Data Extraction Tables

Table 19: Glossary of Select Terms for Data Extraction

Term	Definition
ADD	Average daily dose
ADC	Average daily concentration
BBP	Butyl benzyl phthalate
BLS	Bureau of Labor Statistics
CASRN	Chemical Abstracts Service Registry Number
CBI	Confidential business information
CDR	Chemical Data Reporting
CEHD	Chemical Exposure Health Data
CEM	Consumer Exposure Model
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COC	Concentration of concern
CPSC	Consumer Product Safety Commission
CRA	Cumulative risk assessment
CWA	Clean Water Act
DBP	Dibutyl phthalate
DCHP	Dicyclohexyl phthalate
DEHP	Diethylhexyl phthalate
DIBP	Diisobutyl phthalate
DIDP	Diisodecyl phthalate
DINP	Dicyclohexyl phthalate
DIY	Do-it-yourself
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ESD	Emission scenario document
EU	European Union
FDA	Food and Drug Administration
FFDCA	Federal Food, Drug, and Cosmetic Act
GS	Generic scenario
K _{OC}	Soil organic carbon: water partitioning coefficient
K _{OW}	Octanol: water partition coefficient
HEC	Human equivalent concentration
HED	Human equivalent dose
IADD	Intermediate average daily dose
IR	Ingestion rate
LCD	Life cycle diagram
LOD	Limit of detection
LOAEL	Lowest-observed-adverse-effect level
Log K _{OC}	Logarithmic organic carbon: water partition coefficient
Log K _{OW}	Logarithmic octanol: water partition coefficient
MOA	Mode of action
MOE	Margin of exposure
NAICS	North American Industry Classification System
NEI	National Emissions Inventory
NHANES	National Health and Nutrition Examination Survey
NICNAS	National Industrial Chemicals Notification and Assessment Scheme
NOAEL	No-observed-adverse-effect level
NOEC	No-observed-effect-concentration
NPDES	National Pollutant Discharge Elimination System

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Glossary of Select Terms for Data Extraction Tables

Table 19 ... continued from previous page

Term	Definition
NTP	National Toxicology Program
OCSPP	Office of Chemical Safety and Pollution Prevention
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational exposure limit
OES	Occupational exposure scenario
OEV	Occupational exposure value
ONU	Occupational non-user
OPPT	Office of Pollution Prevention and Toxics
OSHA	Occupational Safety and Health Administration
PBZ	Personal breathing zone
PECO	Population, exposure, comparator, and outcome
PEL	Permissible exposure limit (OSHA)
PESS	Potentially exposed or susceptible subpopulations
PND	Postnatal day
PNOR	Particulates not otherwise regulated
POD	Point of departure
POTW	Publicly owned treatment works
PV	Production volume
PVC	Polyvinyl chloride
REL	Recommended Exposure Limit
RPF	Relative potency factor
RQ	Risk quotient
SACC	Science Advisory Committee on Chemicals
SDS	Safety data sheet
SOC	Standard occupational classification
SpERC	Specific emission release category
SUSB	Statistics of U.S. Businesses (U.S. Census)
TRI	Toxic Release Inventory
TRV	Toxicity reference value
TSCA	Toxic Substances Control Act
TSD	Technical support document
TWA	Time-weighted average
UF	Uncertainty factor
U.S.	United States
WWTP	Wastewater treatment plant
7Q10	The lowest 7-day average flow that occurs (on average) once every 10 years
30Q5	The lowest 30-day average flow that occurs (on average) once every 5 years