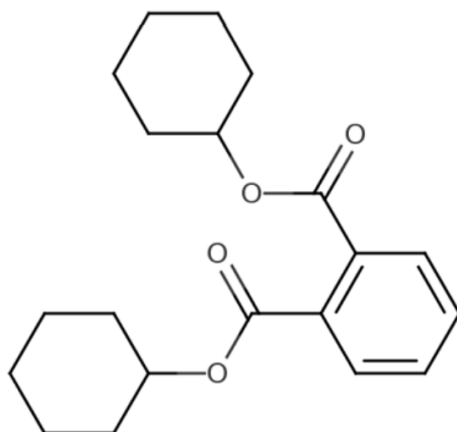

**Draft Data Extraction Information for
General Population, Consumer, and Environmental Exposure for
Dicyclohexyl Phthalate (DCHP)
(1,2- Benzenedicarboxylic acid, 1,2-dicyclohexyl ester)**

Systematic Review Support Document for the Draft Risk Evaluation

CASRN: 84-61-7



December 2024

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 Dicyclohexyl Phthalate (DCHP)*, *Draft Environmental Media and General Population and Environmental Exposure for Dicyclohexyl Phthalate (DCHP)*. 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 Dicyclohexyl Phthalate (DCHP)*, referred hereafter as the “DCHP 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 DCHP 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 DCHP Data Extraction Information for General Population, Consumer, and Environmental Exposure.

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Table 1: Data Extraction Tables of Exposure Monitoring Studies for Aquatic Species

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
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 = 0.13; Sampling Period: Oct., 2016 - Jul., 2017)	LOD: 0.22 $\mu\text{g}/\text{kg}$ LOQ: 0.65 $\mu\text{g}/\text{kg}$	ND	21.9 $\mu\text{g}/\text{kg}$	23.9 $\mu\text{g}/\text{kg}$ (AM)	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	0.19 $\mu\text{g}/\text{g}$ (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	0.2 $\mu\text{g}/\text{g}$ (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	0.24 $\mu\text{g}/\text{g}$ (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	0.15 $\mu\text{g}/\text{g}$ (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	0.3 $\mu\text{g}/\text{g}$ (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	0.15 $\mu\text{g}/\text{g}$ (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	0.16 $\mu\text{g}/\text{g}$ (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	0.19 $\mu\text{g}/\text{g}$ (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	0.39 $\mu\text{g}/\text{g}$ (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	0.26 $\mu\text{g}/\text{g}$ (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> 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	0.22 $\mu\text{g}/\text{g}$ (AM)	NR	NR

Continued on next page ...

Monitoring

Table 1 – 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 <i>OQD:</i> 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	0.33 $\mu\text{g/g}$ (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> 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	0.5 $\mu\text{g/g}$ (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> 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	0.12 $\mu\text{g/g}$ (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> 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	0.22 $\mu\text{g/g}$ (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> 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	0.25 $\mu\text{g/g}$ (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> 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	0.16 $\mu\text{g/g}$ (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> 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	0.16 $\mu\text{g/g}$ (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> 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	0.26 $\mu\text{g/g}$ (AM)	NR	NR
Cheng et al. 2013 HERO ID: 1600107 <i>OQD:</i> 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	0.3 $\mu\text{g/g}$ (AM)	NR	NR

Monitoring

Table 2: Data Extraction Tables of Exposure Monitoring Studies for Dietary

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Wu et al. 2019 HERO ID: 5433502 <i>OQD:</i> 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: 2.4 ng/g	1.4 ng/g	11.0 ng/g	4.5 ng/g (AM)	50th: 3.4 ng/g;	NR
Sakhi et al. 2014 HERO ID: 2501495 <i>OQD:</i> Medium	Oslo, Norway, NO Scenario: Beverages from market basket in Oslo (n = 4; DF = 0; Sampling Period: Apr., 2012)	LOD: Not Reported LOQ: 0.04 µg/kg	ND	0.07 µg/kg	NR	50th: ND;	NR
Sakhi et al. 2014 HERO ID: 2501495 <i>OQD:</i> Medium	Oslo, Norway, NO Scenario: Grain and grain products from market basket in Oslo (n = 5; DF = 0.11; Sampling Period: Apr., 2012)	LOD: Not Reported LOQ: 0.5 µg/kg	ND	5.2 µg/kg	NR	50th: ND;	NR
Sakhi et al. 2014 HERO ID: 2501495 <i>OQD:</i> Medium	Oslo, Norway, NO Scenario: Fish and fish products from market basket in Oslo (n = 6; DF = 0.11; Sampling Period: Apr., 2012)	LOD: Not Reported LOQ: 3 - 25 µg/kg	ND	30 µg/kg	NR	50th: ND;	NR

Table 3: Data Extraction Tables of Exposure Monitoring Studies for Drinking Water

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Le Coadou et al. 2017 HERO ID: 3864659 <i>OQD:</i> 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 ng/L	NR	NR	<LOQ	NR	NR
Le Coadou et al. 2017 HERO ID: 3864659 <i>OQD:</i> 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 ng/L	NR	NR	<LOQ	NR	NR
Le Coadou et al. 2017 HERO ID: 3864659 <i>OQD:</i> 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 ng/L	NR	NR	<LOQ	NR	NR
Le Coadou et al. 2017 HERO ID: 3864659 <i>OQD:</i> 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 ng/L	NR	NR	<LOQ	NR	NR
Le Coadou et al. 2017 HERO ID: 3864659 <i>OQD:</i> High	New Caledonia, NC Scenario: Packaged Spring Water from Italy (n = 1; DF = 0; Sampling Period: Jul., 2013 - Sept., 2013)	LOD: Not Reported LOQ: 5 ng/L	NR	NR	<LOQ	NR	NR
Le Coadou et al. 2017 HERO ID: 3864659 <i>OQD:</i> 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 ng/L	NR	NR	<LOQ	NR	NR
Bach et al. 2020 HERO ID: 6957772 <i>OQD:</i> High	France, FR Scenario: Raw water for public water system (source: surface water) (n = 114; DF = 0; Sampling Period: Nov., 2015 - Jul., 2016)	LOD: Not Reported LOQ: 50 ng/L	NR	NR	ND	NR	NR
Bach et al. 2020 HERO ID: 6957772 <i>OQD:</i> High	France, FR Scenario: Raw water for public water system (source: groundwater) (n = 157; DF = 0; Sampling Period: Nov., 2015 - Jul., 2016)	LOD: Not Reported LOQ: 50 ng/L	NR	NR	ND	NR	NR
Bach et al. 2020 HERO ID: 6957772 <i>OQD:</i> 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 ng/L	NR	NR	ND	NR	NR
Bach et al. 2020 HERO ID: 6957772 <i>OQD:</i> 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 ng/L	NR	NR	ND	NR	NR

Table 4: 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 <i>OQD:</i> High	Massachusetts, US Scenario: Indoor dust from residential and office areas - DCHP (n = 6; DF = 1.0; Sampling Period: 2001)	LOD: Not Reported LOQ: 0.125 µg	0.569 µg/g	5.38 µg/g	1.86 µg/g (AM)	NR	1.62 µg/g (ASD)
Dodson et al. 2015 HERO ID: 2816371 <i>OQD:</i> Medium	Richmond and Bolinas, California, US Scenario: Indoor dust from nonsmoking homes (n = 49; DF = 0.16; Sampling Period: 2006)	LOD: 0.04 µg/g LOQ: Not Reported	- µg/g	13 µg/g	NR	50th: - µg/g; 95th: 7.4 µg/g;	NR
Başaran et al. 2020 HERO ID: 6813710 <i>OQD:</i> Medium	Kocaeli Province, TR Scenario: Indoor dust from homes (n = 90; DF = 1.0; Sampling Period: Feb., 2016 - Apr., 2016)	LOD: Not Reported LOQ: 0.011 ng/g	0.92 µg/g	106.22 µg/g	21.81 µg/g (AM)	50th: 7.34 µg/g;	38.81 µg/g (ASD)
Fromme et al. 2013 HERO ID: 2215411 <i>OQD:</i> Medium	Bavaria, Berlin, and North Rhine-Westfalia, DE Scenario: Dust samples from German daycare centers (n = 63; DF = 0.79; Sampling Period: Nov., 2011 - May, 2012)	LOD: 0.03 mg/kg LOQ: Not Reported	<0.03 mg/kg	239 mg/kg	5.4 mg/kg (AM)	50th: 0.3 mg/kg; 95th: 12 mg/kg;	NR
Dodson et al. 2017 HERO ID: 5755270 <i>OQD:</i> High	Boston, MA, US Scenario: Surface wipes from green, low-income housing, POST-occupancy (n = 27; DF = 0; Sampling Period: Jul., 2013 - Jan., 2014)	LOD: 1.0 µg/ft2 LOQ: 1.0 µg/ft2	NR	NR	ND	NR	NR
Dodson et al. 2017 HERO ID: 5755270 <i>OQD:</i> High	Boston, MA, US Scenario: Surface wipes from green, low-income housing, PRE-occupancy (n = 10; DF = 0; Sampling Period: Jun., 2013 - Jul., 2013)	LOD: 1.0 µg/ft2 LOQ: 1.0 µg/ft2	NR	NR	ND	NR	NR

Table 5: Data Extraction Tables of Exposure Monitoring Studies for Human Biomonitoring

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
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 = 0.17; Sampling Period: 2007 - 2008)	LOD: Not Reported LOQ: 4.0 ng/g	<LOD	9.1 ng/g	NR	NR	NR
Pollack et al. 2014 HERO ID: 2718036 ‡ <i>OQD:</i> Medium <i>MCHP</i>	Salt Lake City, UT; San Francisco, CA, US Scenario: Urine samples from women with fibroids - MCHP (n = 99; DF = 0.05; Sampling Period: 2007 - 2009)	LOD: Not Reported LOQ: 0.2 ng/mL	NR	NR	0 µg/g (GM)	L95thCI (AM): 0 µg/g; U95thCI (AM): 0 µg/g;	NR
Pollack et al. 2014 HERO ID: 2718036 ‡ <i>OQD:</i> Medium <i>MCHP</i>	Salt Lake City, UT; San Francisco, CA, US Scenario: Urine samples from women with no fibroids - MCHP (n = 374; DF = 0.05; Sampling Period: 2007 - 2009)	LOD: Not Reported LOQ: 0.2 ng/mL	NR	NR	0 µg/g (GM)	L95thCI (AM): 0 µg/g; U95thCI (AM): 0 µg/g;	NR
Bae et al. 2015 HERO ID: 2816865 ‡ <i>OQD:</i> Medium <i>MCHP</i>	Michigan; Texas, US Scenario: Urinary concentrations of mothers with boy infant - MCHP (n = 213; DF = 0.05; Sampling Period: 2005 - 2009)	LOD: 0.2 - 1.0 ng/mL LOQ: Not Reported	NR	NR	0.02 ng/mL (GM)	2.5th: 0.01 ng/mL; 97.5th: 0.03 ng/mL;	NR
Bae et al. 2015 HERO ID: 2816865 ‡ <i>OQD:</i> Medium <i>MCHP</i>	Michigan; Texas, US Scenario: Urinary concentrations of mothers with girl infant - MCHP (n = 213; DF = 0.05; Sampling Period: 2005 - 2009)	LOD: 0.2 - 1.0 ng/mL LOQ: Not Reported	NR	NR	0.01 ng/mL (GM)	2.5th: 0.01 ng/mL; 97.5th: 0.02 ng/mL;	NR
Bae et al. 2015 HERO ID: 2816865 ‡ <i>OQD:</i> Medium <i>MCHP</i>	Michigan; Texas, US Scenario: Urinary concentrations of fathers with boy infant - MCHP (n = 212; DF = 0.04; Sampling Period: 2005 - 2009)	LOD: 0.2 - 1.0 ng/mL LOQ: Not Reported	NR	NR	0.01 ng/mL (GM)	2.5th: 0.01 ng/mL; 97.5th: 0.02 ng/mL;	NR
Bae et al. 2015 HERO ID: 2816865 ‡ <i>OQD:</i> Medium <i>MCHP</i>	Michigan; Texas, US Scenario: Urinary concentrations of fathers with girl infant - MCHP (n = 212; DF = 0.04; Sampling Period: 2005 - 2009)	LOD: 0.2 - 1.0 ng/mL LOQ: Not Reported	NR	NR	0.01 ng/mL (GM)	2.5th: 0.01 ng/mL; 97.5th: 0.02 ng/mL;	NR
Rahbar et al. 2017 HERO ID: 4728376 ‡ <i>OQD:</i> Medium <i>MCHP</i>	Alabama, Florida, or Mississippi, US Scenario: Urinary measures from children with Autism - MCHP (n = 24; DF = 0.03; Sampling Period: Jul., 2015 - Sept., 2016)	LOD: 0.98-1.57 ng/mL LOQ: Not Reported	0.43 µg/g	7.77 µg/g	<LOD	NR	NR
Rahbar et al. 2017 HERO ID: 4728376 ‡ <i>OQD:</i> Medium <i>MCHP</i>	Alabama, Florida, or Mississippi, US Scenario: Urinary measures from typically developed children - MCHP (n = 8; DF = 0.03; Sampling Period: Jul., 2015 - Sept., 2016)	LOD: 0.98-1.57 ng/mL LOQ: Not Reported	0.26 µg/g	1.28 µg/g	<LOD	NR	NR

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Table 5 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
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 = 0.8889; Sampling Period: Oct., 2011 - Sept., 2012)	LOD: 0.05 $\mu\text{g/L}$ LOQ: Not Reported	NR	NR	125.02 $\mu\text{g/L}$ (AM)	5th: ND; 25th: 5.83 $\mu\text{g/L}$; 50th: 13.67 $\mu\text{g/L}$; 75th: 38.47 $\mu\text{g/L}$; 95th: 384.38 $\mu\text{g/L}$;	NR
Buckley et al. 2012 HERO ID: 5772514 ‡ <i>OQD:</i> Medium <i>MCHP</i>	Multiple locations, US Scenario: Creatinine adjusted urine from women 22-24 weeks pregnant - MCHP (n = 50; DF = 0.02; Sampling Period: Jun., 2002 - Sept., 2003)	LOD: 0.28 ng/mL LOQ: Not Reported	<LOD	0.8 $\mu\text{g/g}$	<LOD	50th: <LOD;	0.1 $\mu\text{g/g}$ (ASD)
Guo et al. 2011 HERO ID: 787935 ‡ <i>OQD:</i> High <i>MCHP</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	0.2 ng/mL (AM); 1.1 ng/mL (GM)	10th: ND; 50th: ND; 90th: 0.9 ng/mL;	NR
Guo et al. 2011 HERO ID: 787935 ‡ <i>OQD:</i> High <i>MCHP</i>	Guangzhou; Shanghai; Qiqihaer, 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	0.7 ng/mL (AM); 7.0 ng/mL (GM)	10th: ND; 50th: ND; 90th: 5.3 ng/mL;	NR
Guo et al. 2011 HERO ID: 787935 ‡ <i>OQD:</i> High <i>MCHP</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	ND	10th: ND; 50th: ND; 90th: ND;	NR
Guo et al. 2011 HERO ID: 787935 ‡ <i>OQD:</i> High <i>MCHP</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	0.05 ng/mL (AM); 0.3 ng/mL (GM)	10th: ND; 50th: ND; 90th: ND;	NR
Guo et al. 2011 HERO ID: 787935 ‡ <i>OQD:</i> High <i>MCHP</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	0.1 ng/mL (AM); 0.6 ng/mL (GM)	10th: ND; 50th: ND; 90th: 0.5 ng/mL;	NR
Guo et al. 2011 HERO ID: 787935 ‡ <i>OQD:</i> High <i>MCHP</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	ND	10th: ND; 50th: ND; 90th: ND;	NR
Enke et al. 2013 HERO ID: 1588876 ‡ <i>OQD:</i> Medium <i>MCHP</i>	Jena, DE Scenario: Urine from pregnant women close to birth; mother-child pairs (n = 9; DF = 0; Sampling Period: 2010)	LOD: Not Reported LOQ: 0.2 $\mu\text{g/L}$	NR	NR	<LOQ	NR	NR

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Table 5 – 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>MCHP</i>	Jena, DE Scenario: Urine from pregnant women (n = 47; DF = 0; Sampling Period: 2008)	LOD: Not Reported LOQ: 0.2 µg/L	NR	NR	<LOQ	NR	NR
Enke et al. 2013 HERO ID: 1588876 [‡] <i>OQD:</i> Medium <i>MCHP</i>	Jena, DE Scenario: Newborns first urine from mother-child pairs (n = 9; DF = 0; Sampling Period: 2010)	LOD: Not Reported LOQ: 0.2 µg/L	NR	NR	<LOQ	NR	NR
Enke et al. 2013 HERO ID: 1588876 [‡] <i>OQD:</i> Medium <i>MCHP</i>	Jena, DE Scenario: Newborns urine day 2 to 5 (n = 20; DF = 0; Sampling Period: 2008)	LOD: Not Reported LOQ: 0.2 µg/L	NR	NR	<LOQ	NR	NR
Asimakopoulos et al. 2016 HERO ID: 3070934 [‡] <i>OQD:</i> High <i>mCHP</i>	Jeddah, SA Scenario: Urine from healthy general population in Jeddah, Saudi Arabia (n = 130; DF = 0.262; Sampling Period: May, 2014 - Jun., 2014)	LOD: 0.066 ng/mL LOQ: 0.22 ng/mL	0 ng/mL	0.063 ng/mL	0.11 ng/mL (AM)	NR	NR

[‡] Data extraction results are for metabolite concentrations.

Table 6: Data Extraction Tables of Exposure Monitoring Studies for Indoor Air

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Otake et al. 2004 HERO ID: 789515 <i>OQD:</i> 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	0.75 $\mu\text{g}/\text{m}^3$	0.12 $\mu\text{g}/\text{m}^3$ (AM)	50th: 0.07 $\mu\text{g}/\text{m}^3$;	0.18 $\mu\text{g}/\text{m}^3$ (ASD)
Yoshida et al. 2006 HERO ID: 1949033 <i>OQD:</i> Medium	Osaka, JP Scenario: Indoor air in 101 cars (n = 101; DF = 0.14; Sampling Period: Mar., 2004 - Oct., 2004)	LOD: Not Reported LOQ: Not Reported	0 $\mu\text{g}/\text{m}^3$	0.005 $\mu\text{g}/\text{m}^3$	NR	50th: 0 $\mu\text{g}/\text{m}^3$;	NR
Otake et al. 2001 HERO ID: 1598712 <i>OQD:</i> 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: 0.25 μg	POINT VALUE(S): [0.01 $\mu\text{g}/\text{m}^3$; 0.02 $\mu\text{g}/\text{m}^3$; <0.0012 $\mu\text{g}/\text{m}^3$; 0.04 $\mu\text{g}/\text{m}^3$; 0.17 $\mu\text{g}/\text{m}^3$; 0.15 $\mu\text{g}/\text{m}^3$]				
Fromme et al. 2013 HERO ID: 2215411 <i>OQD:</i> Medium	Bavaria, Berlin, and North Rhine-Westfalia, DE Scenario: Indoor air sample from German daycare centers (n = 63; DF = 0.03; Sampling Period: Nov., 2011 - May, 2012)	LOD: 3 ng/m^3 LOQ: 10.0 ng/m^3	5 ng/m^3	64 ng/m^3	NR	NR	NR
Takeuchi et al. 2014 HERO ID: 2519043 <i>OQD:</i> Medium	Sapporo, Hokkaido, JP Scenario: Indoor air from bedrooms and living rooms of 6 homes (n = 12; DF = 0.08333; Sampling Period: Jul., 2012 - Aug., 2012)	LOD: Not Reported LOQ: 0.006 $\mu\text{g}/\text{m}^3$	<LOQ	0.014 $\mu\text{g}/\text{m}^3$	<LOQ	NR	0.0032 $\mu\text{g}/\text{m}^3$ (ASD)
Dodson et al. 2019 HERO ID: 5432871 <i>OQD:</i> High	Greater Boston, MA, US Scenario: Indoor air from a variety of spaces. Active air sampling (n = 37; DF = 0; Sampling Period: Oct., 2013 - Jul., 2015)	LOD: Not Reported LOQ: 3.4 ng/m^3	NR	ND	NR	NR	NR
Dodson et al. 2017 HERO ID: 5755270 <i>OQD:</i> High	Boston, MA, US Scenario: Indoor air from green, low-income housing, PRE-occupancy (n = 10; DF = 0.1; Sampling Period: Jun., 2013 - Jul., 2013)	LOD: 4.4 ng/m^3 LOQ: 38.0 ng/m^3	<LOD	<LOQ	<LOD	50th: <LOD; 95th: <LOQ;	NR
Dodson et al. 2017 HERO ID: 5755270 <i>OQD:</i> High	Boston, MA, US Scenario: Indoor air from green, low-income housing, POST-occupancy (n = 25; DF = 0.04; Sampling Period: Jul., 2013 - Jan., 2014)	LOD: 4.4 ng/m^3 LOQ: 38.0 ng/m^3	<LOD	<LOQ	<LOD	50th: <LOD; 95th: <LOD;	NR

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

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Başaran et al. 2020 HERO ID: 6813710 <i>OQD:</i> Medium	Kocaeli Province, TR Scenario: Road dust in front of homes (n = 90; DF = 1; Sampling Period: Feb., 2016 - Apr., 2016)	LOD: Not Reported LOQ: 0.011 ng/g	0.02 $\mu\text{g/g}$	1.55 $\mu\text{g/g}$	0.39 $\mu\text{g/g}$ (AM)	50th: 0.12 $\mu\text{g/g}$;	0.61 $\mu\text{g/g}$ (ASD)

Table 8: Data Extraction Tables of Exposure Monitoring Studies for Sediment

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Liu et al. 2014 HERO ID: 2349860 <i>OQD:</i> Medium	Pearl River Delta region, CN Scenario: Zhujiang river sediment (n = 11; DF = 0; Sampling Period: Jul., 2006)	LOD: 1-9 pg LOQ: 1.12-8.59 ng/g	NR	NR	ND	NR	NR
Liu et al. 2014 HERO ID: 2349860 <i>OQD:</i> Medium	Pearl River Delta region, CN Scenario: Dongjiang river sediment (n = 21; DF = 0; Sampling Period: Jul., 2006)	LOD: 1-9 pg LOQ: 1.12-8.59 ng/g	NR	NR	ND	NR	NR
Liu et al. 2014 HERO ID: 2349860 <i>OQD:</i> 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	n.d.	0.011 $\mu\text{g/g}$	0.001 $\mu\text{g/g}$ (AM)	50th: 0.011 $\mu\text{g/g}$;	0.002 $\mu\text{g/g}$ (ASD)
Liu et al. 2014 HERO ID: 2349860 <i>OQD:</i> Medium	Pearl River Delta region, CN Scenario: Beijiang river sediment (n = 11; DF = 0; Sampling Period: Jul., 2006)	LOD: 1-9 pg LOQ: 1.12-8.59 ng/g	NR	NR	ND	NR	NR
Liu et al. 2014 HERO ID: 2349860 <i>OQD:</i> Medium	Pearl River Delta region, CN Scenario: Shunde river sediment (n = 10; DF = 0; Sampling Period: Jul., 2006)	LOD: 1-9 pg LOQ: 1.12-8.59 ng/g	NR	NR	ND	NR	NR
Li et al. 2017 HERO ID: 3859571 <i>OQD:</i> High	Southeast China, CN Scenario: SPM from Jiulong River estuary during wet season (n = 15; DF = 0; Sampling Period: Aug., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Li et al. 2017 HERO ID: 3859571 <i>OQD:</i> High	Southeast China, CN Scenario: SPM from Jiulong River estuary during normal season (n = 15; DF = 0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Li et al. 2017 HERO ID: 3859571 <i>OQD:</i> High	Southeast China, CN Scenario: SPM from Jiulong River estuary during dry season (n = 15; DF = 0; Sampling Period: Jan., 2015)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Li et al. 2017 HERO ID: 3859571 <i>OQD:</i> High	Southeast China, CN Scenario: Sediment from Jiulong River estuary during dry season (n = 15; DF = 0; Sampling Period: Jan., 2015)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Li et al. 2017 HERO ID: 3859571 <i>OQD:</i> High	Southeast China, CN Scenario: Sediment from Jiulong River estuary during normal season (n = 15; DF = 0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Li et al. 2017 HERO ID: 3859571 <i>OQD:</i> High	Southeast China, CN Scenario: Sediment from Jiulong River estuary during wet season (n = 15; DF = 0; Sampling Period: Aug., 2014)	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
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.11 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.23 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.16 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.59 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.11 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.51 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.35 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.11 mg/kg (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.08 mg/kg (AM)	NR	NR
Lee et al. 2019 HERO ID: 5043593 <i>OQD:</i> High	Pyeongtaek and Asan, Gyeonggi Province, KR Scenario: Lake Sediment affected from industrial complex (n = 47; DF = 0.06; Sampling Period: Oct., 2016 - Jul., 2017)	LOD: 0.41 μg/kg LOQ: 1.24 μg/kg	ND	18.8 μg/kg	0.7 μg/kg (AM)	NR	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Sun et al. 2014 HERO ID: 5188487 <i>OQD:</i> High	Pearl River Delta region, CN Scenario: Sediments in dry season (n = 12; DF = 1; Sampling Period: Dec., 2008)	LOD: 0.09 ng/g LOQ: Not Reported	0.74 ng/g	270 ng/g	NR	NR	NR
Sun et al. 2014 HERO ID: 5188487 <i>OQD:</i> High	Pearl River Delta region, CN Scenario: Sediments in wet season (n = 12; DF = 1; Sampling Period: Jul., 2009)	LOD: 0.09 ng/g LOQ: Not Reported	0.45 ng/g	70 ng/g	NR	NR	NR
Zhang et al. 2018 HERO ID: 5433212 <i>OQD:</i> 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 = 0; Sampling Period: Nov., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Zhang et al. 2018 HERO ID: 5433212 <i>OQD:</i> 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; Sampling Period: Nov., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Zhang et al. 2018 HERO ID: 5433212 <i>OQD:</i> 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; Sampling Period: Nov., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Zhang et al. 2018 HERO ID: 5433212 <i>OQD:</i> 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 = 0.05; Sampling Period: Nov., 2014)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [0.01 mg/kg; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND; ND]				
Wu et al. 2019 HERO ID: 5433502 <i>OQD:</i> High	Yuyao City, Zhejiang Province, CN Scenario: Sediment samples from downwind of a plastic market (n = 16; DF = 0.67; Sampling Period: May, 2017)	LOD: Not Reported LOQ: 2.0 ng/g	ND	3.6 ng/g	2.3 ng/g (AM)	50th: 2.3 ng/g;	NR
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 = 0.1579; Sampling Period: Mar., 2017 - Apr., 2017)	LOD: 0.12-1.6 µg/kg LOQ: Not Reported	POINT VALUE(S): [ND; ND; 18.6 µg/kg; ND; ND; ND; 36.7 µg/kg; ND; ND; ND; ND; 11.6 µg/kg; ND; ND; ND; ND; ND; ND; ND]				
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 = 0.73; Sampling Period: 2005 - 2006)	LOD: 3.1 ng/g LOQ: 9.2 ng/g	<LOQ	44 ng/g	15 ng/g (AM)	50th: 15 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 = 0.82; Sampling Period: 2017)	LOD: 3.1 ng/g LOQ: 9.2 ng/g	<LOQ	20 ng/g	14 ng/g (AM)	50th: 14 ng/g;	NR

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
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 = 0.5179; Sampling Period: Jul., 2015)	LOD: 0.12-1.6 $\mu\text{g}/\text{kg}$ LOQ: Not Reported	NR	NR	NR	NR	NR

Table 9: 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. 2008 HERO ID: 680472 <i>OQD:</i> Medium	Guangzhou, Guangdong province, CN Scenario: Agricultural soil in peri-urban area - Baiyun (n = 6; DF = 0.5; Sampling Period: Jul., 2006)	LOD: 1 pg LOQ: 9 pg	ND	0.122 $\mu\text{g/g}$	0.027 $\mu\text{g/g}$ (GM)	50th: 0.022 $\mu\text{g/g}$;	NR
Zeng et al. 2008 HERO ID: 680472 <i>OQD:</i> Medium	Guangzhou, Guangdong province, CN Scenario: Agricultural soil in peri-urban area - Liwan (n = 8; DF = 0.625; Sampling Period: Jul., 2006)	LOD: 1 pg LOQ: 9 pg	ND	0.071 $\mu\text{g/g}$	0.014 $\mu\text{g/g}$ (GM)	50th: 0.008 $\mu\text{g/g}$;	NR
Zeng et al. 2008 HERO ID: 680472 <i>OQD:</i> Medium	Guangzhou, Guangdong province, CN Scenario: Agricultural soil in peri-urban area - Tianhe (n = 12; DF = 0.333; Sampling Period: Jul., 2006)	LOD: 1 pg LOQ: 9 pg	ND	0.058 $\mu\text{g/g}$	0.007 $\mu\text{g/g}$ (GM)	50th: 0.008 $\mu\text{g/g}$;	NR
Zeng et al. 2008 HERO ID: 680472 <i>OQD:</i> Medium	Guangzhou, Guangdong province, CN Scenario: Agricultural soil in peri-urban area - Haizhu (n = 4; DF = 0.1; Sampling Period: Jul., 2006)	LOD: 1 pg LOQ: 9 pg	0.016 $\mu\text{g/g}$	0.086 $\mu\text{g/g}$	0.044 $\mu\text{g/g}$ (GM)	50th: 0.037 $\mu\text{g/g}$;	NR
Zeng et al. 2008 HERO ID: 680472 <i>OQD:</i> Medium	Guangzhou, Guangdong province, CN Scenario: Agricultural soil in peri-urban area - Panyu (n = 10; DF = 0.6; Sampling Period: Jul., 2006)	LOD: 1 pg LOQ: 9 pg	ND	0.018 $\mu\text{g/g}$	0.007 $\mu\text{g/g}$ (GM)	50th: 0.012 $\mu\text{g/g}$;	NR
Zeng et al. 2009 HERO ID: 680473 <i>OQD:</i> High	Guangzhou City, CN Scenario: Urban soil along roadsides in Guangzhou City - DCHP (n = 17; DF = 0.59; Sampling Period: Dec., 2005)	LOD: Not Reported LOQ: Not Reported	ND	0.095 $\mu\text{g/g}$	0.036 $\mu\text{g/g}$ (AM)	50th: 0.062 $\mu\text{g/g}$;	0.037 $\mu\text{g/g}$ (ASD)
Zeng et al. 2009 HERO ID: 680473 <i>OQD:</i> High	Guangzhou City, CN Scenario: Urban soil in resident areas of Guangzhou City - DCHP (n = 13; DF = 0.31; Sampling Period: Dec., 2005)	LOD: Not Reported LOQ: Not Reported	ND	0.171 $\mu\text{g/g}$	0.025 $\mu\text{g/g}$ (AM)	50th: 0.071 $\mu\text{g/g}$;	0.05 $\mu\text{g/g}$ (ASD)
Zeng et al. 2009 HERO ID: 680473 <i>OQD:</i> High	Guangzhou City, CN Scenario: Urban soil in Guangzhou City parks- DCHP (n = 7; DF = 0.43; Sampling Period: Dec., 2005)	LOD: Not Reported LOQ: Not Reported	ND	0.057 $\mu\text{g/g}$	0.014 $\mu\text{g/g}$ (AM)	50th: 0.041 $\mu\text{g/g}$;	0.02 $\mu\text{g/g}$ (ASD)
Liu et al. 2010 HERO ID: 697396 <i>OQD:</i> High	Hubei Province, CN Scenario: Topsoil of JiangHan Plain - Summer (n = 9; DF = 0.11; Sampling Period: Jul., 2007)	LOD: 22-341 ng/L LOQ: Not Reported	ND	29.6 ng/g	3.3 ng/g (GM)	NR	NR
Liu et al. 2010 HERO ID: 697396 <i>OQD:</i> High	Hubei Province, CN Scenario: Topsoil of JiangHan Plain - Winter (n = 17; DF = 0.41; Sampling Period: Jan., 2008)	LOD: 22-341 ng/L LOQ: Not Reported	ND	301.9 ng/g	46.4 ng/g (GM)	NR	NR
Niu et al. 2014 HERO ID: 2519080 <i>OQD:</i> High	31 Provinces, CN Scenario: Soils from agriculture fields in China (n = 123; DF = 0.96; Sampling Period: Apr., 2013 - May, 2013)	LOD: 0.008- 0.295 $\mu\text{g/kg}$ LOQ: Not Reported	ND	40.9 $\mu\text{g/kg}$	5.84 $\mu\text{g/kg}$ (AM)	50th: 4.47 $\mu\text{g/kg}$;	96.4 % (CV)

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Zhang et al. 2015 HERO ID: 2804035 <i>OQD:</i> Medium	HeiLongjiang, JiLin, LiaoNing Provinces, CN Scenario: Soil from greenhouse in China (Spring) (n = 27; DF = 1.0; Sampling Period: Spring, 2013)	LOD: 1.90 $\mu\text{g}/\text{kg}$ LOQ: Not Reported	0.0082 mg/kg	0.153 mg/kg	0.043 mg/kg (AM)	50th: 0.031 mg/kg ;	0.0019 mg/kg (ASD)
Zhang et al. 2015 HERO ID: 2804035 <i>OQD:</i> Medium	HeiLongjiang, JiLin, LiaoNing Provinces, CN Scenario: Soil from greenhouse in China (Summer) (n = 27; DF = 1.0; Sampling Period: Summer, 2013)	LOD: 1.90 $\mu\text{g}/\text{kg}$ LOQ: Not Reported	0.0061 mg/kg	0.35 mg/kg	0.090 mg/kg (AM)	50th: 0.064 mg/kg ;	0.0123 mg/kg (ASD)
Zhang et al. 2015 HERO ID: 2804035 <i>OQD:</i> Medium	HeiLongjiang, JiLin, LiaoNing Provinces, CN Scenario: Soil from greenhouse in China (Autumn) (n = 27; DF = 1.0; Sampling Period: Fall, 2013)	LOD: 1.90 $\mu\text{g}/\text{kg}$ LOQ: Not Reported	0.016 mg/kg	0.072 mg/kg	0.048 mg/kg (AM)	50th: 0.057 mg/kg ;	0.0034 mg/kg (ASD)
Sun et al. 2015 HERO ID: 3070929 <i>OQD:</i> Medium	Shanghai City, Jiangsu Province, and Zhejiang Province, CN Scenario: Agriculture soils from Yangtze River Delta (n = 241; DF = 0.07; Sampling Period: Jun., 2014)	LOD: 0.05 - 0.28 ng/g LOQ: Not Reported	ND	265 ng/g	35.3 ng/g (AM)	50th: 1.4 ng/g ;	NR
Wu et al. 2019 HERO ID: 5433502 <i>OQD:</i> High	Yuyao City, Zhejiang Province, CN Scenario: Soil samples from downwind of a plastic market (n = 21; DF = 1.0; Sampling Period: May, 2017)	LOD: Not Reported LOQ: 2.0 ng/g	0.6 ng/g	6.1 ng/g	2.7 ng/g (AM)	50th: 2.2 ng/g ;	NR
Li et al. 2016 HERO ID: 5540829 <i>OQD:</i> 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	1.450 mg/kg	0.125 mg/kg (AM)	NR	0.301 mg/kg (ASD)
Zhang et al. 2019 HERO ID: 5541389 <i>OQD:</i> High	Guiyu, Shantou, CN Scenario: Soil in residential area A with e-waste recycling workshops (n = 11; DF = 1.0; Sampling Period: Mar., 2019)	LOD: 0.16- 1.65 $\mu\text{g}/\text{L}$ LOQ: Not Reported	NR	NR	3957.60 ng/g (AM); 2774.10 ng/g (GM)	50th: 2685.62 ng/g ;	NR
Zhang et al. 2019 HERO ID: 5541389 <i>OQD:</i> High	Guiyu, Shantou, CN Scenario: Soil in residential area B with few to none e-waste recycling workshops (n = 7; DF = 1.0; Sampling Period: Mar., 2019)	LOD: 0.16- 1.65 $\mu\text{g}/\text{L}$ LOQ: Not Reported	NR	NR	1840.14 ng/g (AM); 981.99 ng/g (GM)	50th: 1213.50 ng/g ;	NR
Zhang et al. 2019 HERO ID: 5541389 <i>OQD:</i> High	Guiyu, Shantou, CN Scenario: Soil in agricultural area used for rice, fruit and vegetables (n = 28; DF = 1.0; Sampling Period: Mar., 2019)	LOD: 0.16- 1.65 $\mu\text{g}/\text{L}$ LOQ: Not Reported	NR	NR	703.56 ng/g (AM); 515.91 ng/g (GM)	50th: 462.20 ng/g ;	NR
Rodríguez-Ramos et al. 2019 HERO ID: 5617923 <i>OQD:</i> High	Tenerife, Canary Islands, ES Scenario: Tenerife agricultural soil utilized for cereals (barley and lupin bean) and potato cultivation (n = 10; DF = 0; Sampling Period: Jul., 2019)	LOD: 0.041 $\mu\text{g}/\text{kg}$ LOQ: 0.14 $\mu\text{g}/\text{kg}$	NR	NR	<LOQ	NR	NR

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Table 9 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
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: 0.051 $\mu\text{g}/\text{kg}$ LOQ: 0.17 $\mu\text{g}/\text{kg}$	NR	NR	ND	NR	NR

Table 10: Data Extraction Tables of Exposure Monitoring Studies for Surface Water

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Li et al. 2017 HERO ID: 3859571 <i>OQD:</i> High	Southeast China, CN Scenario: Water from Jiulong River estuary during wet season (n = 15; DF = 0; Sampling Period: Aug., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Li et al. 2017 HERO ID: 3859571 <i>OQD:</i> High	Southeast China, CN Scenario: Water from Jiulong River estuary during normal season (n = 15; DF = 0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Li et al. 2017 HERO ID: 3859571 <i>OQD:</i> High	Southeast China, CN Scenario: Water from Jiulong River estuary during dry season (n = 15; DF = 0; Sampling Period: Jan., 2015)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.20 μg/L (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.25 μg/L (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> High	Pearl River Delta region, CN Scenario: Water of aquaculture fish ponds in Pearl River Delta - Nanhai (n = 12; DF = NR; Sampling Period: Jul., 2016 - Sept., 2017)	LOD: Not Reported LOQ: 8.0 ng/g	NR	NR	0.23 μg/L (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.02 μg/L (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.02 μg/L (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.02 μg/L (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.05 μg/L (AM)	NR	NR

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Table 10 – 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 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.02 $\mu\text{g/L}$ (AM)	NR	NR
Cheng et al. 2019 HERO ID: 5043518 <i>OQD:</i> 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: 8.0 ng/g	NR	NR	0.02 $\mu\text{g/L}$ (AM)	NR	NR
Lee et al. 2019 HERO ID: 5043593 <i>OQD:</i> 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: 0.02 ng/m^3 LOQ: 0.05 ng/m^3	NR	NR	ND	NR	NR
Lee et al. 2019 HERO ID: 5043593 <i>OQD:</i> High	Pyeongtaek and Asan, Gyeonggi Province, KR Scenario: Lake Air (Particulate) affected from industrial complex (n = 4; DF = 0.25; Sampling Period: Oct., 2016 - Jul., 2017)	LOD: 0.01 ng/m^3 LOQ: 0.02 ng/m^3	ND	0.03 ng/m^3	0.01 ng/m^3 (AM)	50th: 0.03 ng/m^3 ;	NR
Lee et al. 2019 HERO ID: 5043593 <i>OQD:</i> 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/m^3 LOQ: 0.033 ng/m^3	ND	0.03 ng/m^3	0.01 ng/m^3 (AM)	NR	NR
Lee et al. 2019 HERO ID: 5043593 <i>OQD:</i> High	Pyeongtaek and Asan, Gyeonggi Province, KR Scenario: Lake Water affected from industrial complex (n = 47; DF = 0.21; Sampling Period: Oct., 2016 - Jul., 2017)	LOD: 0.02 $\mu\text{g/L}$ LOQ: 0.05 $\mu\text{g/L}$	ND	0.07 $\mu\text{g/L}$	0.001 $\mu\text{g/L}$ (AM)	NR	NR
Sun et al. 2014 HERO ID: 5188487 <i>OQD:</i> High	Pearl River Delta region, CN Scenario: River water in dry season (n = 12; DF = 1; Sampling Period: Dec., 2008)	LOD: 0.04 ng/L LOQ: Not Reported	0.11 ng/L	1.2 ng/L	NR	NR	NR
Sun et al. 2014 HERO ID: 5188487 <i>OQD:</i> High	Pearl River Delta region, CN Scenario: River water in wet season (n = 12; DF = 1; Sampling Period: Jul., 2009)	LOD: 0.04 ng/L LOQ: Not Reported	1.9 ng/L	11 ng/L	NR	NR	NR
Zhang et al. 2018 HERO ID: 5433212 <i>OQD:</i> 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 <i>OQD:</i> 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; Sampling Period: Nov., 2014)	LOD: 0.4-0.32 ng/L LOQ: Not Reported	NR	NR	ND	NR	NR

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Monitoring

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Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance	
Zhang et al. 2018 HERO ID: 5433212 <i>OQD:</i> 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; 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 <i>OQD:</i> 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): [ND; 0.73 ng/L; ND]					
Zhang et al. 2018 HERO ID: 5433212 <i>OQD:</i> 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 <i>OQD:</i> 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; 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 <i>OQD:</i> 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; 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 <i>OQD:</i> 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; 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 <i>OQD:</i> 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): [2.8 ng/L; ND; 2.98 ng/L]					
Zhang et al. 2018 HERO ID: 5433212 <i>OQD:</i> 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 = 0.111; Sampling Period: Nov., 2014)	LOD: 0.4-0.32 ng/L LOQ: Not Reported	POINT VALUE(S): [1.34 ng/L; ND; ND; ND; ND; ND; ND; ND; ND]					
Zhang et al. 2018 HERO ID: 5433253 <i>OQD:</i> High	Eastern Coast of China, CN Scenario: Surface water from Changjiang River Estuary and adjacent area (n = 133; DF = 0.84; Sampling Period: Mar., 2015)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	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 = 0.8929; 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 = 0.3980; 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 = 0.4691; 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 = 0.1216; 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 = 0.2958; Sampling Period: May, 2017)	LOD: 0.04-0.32 ng/L LOQ: Not Reported	NR	NR	NR	NR	NR
Keil et al. 2011 HERO ID: 788135 <i>OQD:</i> Medium	Puget Sound, WA, US Scenario: Water from highly urbanized waterway (n = 66; DF = 0.09; Sampling Period: Mar., 2010)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	25th: 1.03 ng/L; 75th: 3.56 ng/L;	NR
Keil et al. 2011 HERO ID: 788135 <i>OQD:</i> Medium	Barkley Sound, British Columbia, CA Scenario: Water from unaltered fjord (n = 22; DF = 0.5; Sampling Period: Mar., 2010)	LOD: Not Reported LOQ: Not Reported	1.46 ng/L	13.4 ng/L	NR	25th: 2.21 ng/L; 50th: 2.95 ng/L; 75th: 5.19 ng/L;	NR

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

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
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 = 1.0; Sampling Period: Jun., 2010 - Oct., 2010)	LOD: 1.0 pg LOQ: 2.0 pg/g	0.039 $\mu\text{g/g}$	0.19 $\mu\text{g/g}$	0.10 $\mu\text{g/g}$ (AM)	50th: 0.11 $\mu\text{g/g}$;	NR
Wu et al. 2019 HERO ID: 5442818 <i>OQD:</i> High	Qingdao, China, CN Scenario: Influent wastewater from Chengyang WWTP in a coastal city of China (n = 57; DF = 1.0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	11.46 ng/mL	14.47 ng/mL	12.54 ng/mL (AM)	NR	NR
Wu et al. 2019 HERO ID: 5442818 <i>OQD:</i> High	Qingdao, China, CN Scenario: Influent wastewater from Licun WWTP in a coastal city of China (n = 57; DF = 1.0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	9.96 ng/mL	14.46 ng/mL	12.04 ng/mL (AM)	NR	NR
Wu et al. 2019 HERO ID: 5442818 <i>OQD:</i> High	Qingdao, China, CN Scenario: Influent wastewater from Haibo River WWTP in a coastal city of China (n = 57; DF = 1.0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	7.98 ng/mL	8.66 ng/mL	8.34 ng/mL (AM)	NR	NR
Wu et al. 2019 HERO ID: 5442818 <i>OQD:</i> High	Qingdao, China, CN Scenario: Effluent wastewater from Chengyang WWTP in a coastal city of China (n = 57; DF = 1.0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	3.84 ng/mL (AM)	NR	NR
Wu et al. 2019 HERO ID: 5442818 <i>OQD:</i> High	Qingdao, China, CN Scenario: Effluent wastewater from Licun WWTP in a coastal city of China (n = 57; DF = 1.0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	3.78 ng/mL (AM)	NR	NR
Wu et al. 2019 HERO ID: 5442818 <i>OQD:</i> High	Qingdao, China, CN Scenario: Effluent wastewater from Haibo River WWTP in a coastal city of China (n = 57; DF = 1.0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	0.17 ng/mL (AM)	NR	NR
Wu et al. 2019 HERO ID: 5442818 <i>OQD:</i> High	Qingdao, China, CN Scenario: Sludge from Chengyang WWTP in a coastal city of China (n = 9; DF = 1.0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	0.31 ng/mL (AM)	NR	0.21 ng/mL (ASD)
Wu et al. 2019 HERO ID: 5442818 <i>OQD:</i> 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 <i>OQD:</i> High	Qingdao, China, CN Scenario: Sludge from Haibo River WWTP in a coastal city of China (n = 9; DF = 1.0; Sampling Period: Apr., 2014)	LOD: Not Reported LOQ: Not Reported	NR	NR	0.31 ng/mL (AM)	NR	0.19 ng/mL (ASD)

Glossary of Select Terms for Data Extraction Tables

Dicyclohexyl Phthalate

Table 12: Glossary of Select Terms for Data Extraction

Term	Definition
ADD	Average daily dose
ADC	Average daily concentration
AERMOD	American Meteorological Society/EPA Regulatory Model
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
CPSC	Consumer Product Safety Commission
CWA	Clean Water Act
DEHP	Diethylhexyl phthalate
DIDP	Diisodecyl phthalate
DINP	Diisononyl phthalate
DIY	Do-it-yourself
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency (or the 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
LOEC	Lowest-observed-effect concentration
Log K_{OC}	Logarithmic organic carbon: water partition coefficient
Log K_{OW}	Logarithmic octanol: water partition coefficient
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
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
ONU	Occupational non-user

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Glossary of Select Terms for Data Extraction Tables

Dicyclohexyl Phthalate

Table 12 ... continued from previous page

Term	Definition
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
PPAR α	Peroxisome proliferator activated receptor alpha
PVC	Polyvinyl chloride
REL	Recommended Exposure Limit
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