Table 1: Large U.S. water systems with high average levels of 1,4-dioxane contamination

WATER SYSTEM	LOCATION*	POPULATION SERVED	AVERAGE LEVEL OF DETECTION, IN PARTS PER BILLION (YEARS TESTED)	FACTOR EXCEEDING EPA'S NEGLIGIBLE RISK LEVEL OF 0.35 PARTS PER BILLION (ROUNDED TO A WHOLE NUMBER)			
CALIFORNIA							
Tract 180 Mutual Water Company	Cudahy/Los Angeles County	14,000	4.9 (2011-2015)1	14x			
California Water Service Company— East Los Angeles	East Los Angeles	150,446	3.83 (2010-2015) <sup>2</sup>	11x			
Bellflower— Somerset MWC	Bellflower/Los Angeles County	46,000	3.19 (2011-2015) <sup>3</sup>	9x			
Liberty Utilities— Bellflower—Norwalk	Parts of Bellflower and Norwalk/Los Angeles County	72,884	2.67 (2010-2015)4	8x			
Norwalk Water Department	Norwalk/Los Angeles County	18,372	2.37 (2011-2015)5	7x			
Lynwood Water Department	Lynwood/Los Angeles County	71,297	2.12 (2011-2015) <sup>6</sup>	6x			
Mesa Water District	Costa Mesa/ Orange County	108,000	1.4 (2015, as reported by the water utility) <sup>7</sup>	4x			
MINNESOTA							
New Brighton	New Brighton	22,123	2.99 (2014-2015) <sup>8</sup>	9x			
NEW JERSEY							
United Water Camden	Camden	46,585	2.7 (2015) <sup>9</sup>	7x			
Aqua NJ— Eastern Division	Parts of Berkeley Township/Ocean County	12,000	2.32 (2013)10	7x			
Merchantville Pennsauken Water Commission	Pennsauken, Merchantville, Cherry Hill, Camden	47,144	2.03 (2014-2015)11	6x			
NEW YORK							
Bethpage Water District	Bethpage/ Nassau County (Long Island)	33,000	2.93 (2013)12	8x			
Hicksville Water District	Hicksville/ Nassau County (Long Island)	47,810	2.81 (2013-2014) <sup>13</sup>	8x			
Hempstead	Village of Hempstead/ Nassau County (Long Island)	56,000	2.13 (2013)14	6x			

WATER SYSTEM	LOCATION*	POPULATION SERVED	AVERAGE LEVEL OF DETECTION, IN PARTS PER BILLION (YEARS TESTED)	FACTOR EXCEEDING EPA'S NEGLIGIBLE RISK LEVEL OF 0.35 PARTS PER BILLION (ROUNDED TO A WHOLE NUMBER)		
Plainview Water District	Plainview/ Nassau County (Long Island)	35,000	1.98 (2014)15	6x		
Town of Hempstead Water Department	Town of Hempstead/ Nassau County (Long Island)	110,000	1.26 (2014-2015)16	4x		
NORTH CAROLINA						
City of Sanford	Sanford	41,483	5.83 (2013-2014)17	17x		
Fayetteville Public Works Commission	Fayetteville	211,997	3.77 (2013)18	11x		
Harnett County Department of Public Utilities	Lillington	90,004	3.55 (2014-2015) <sup>19</sup>	10x		
Town of Holly Springs	Holly Springs	26,000	3.28 (2013-2014)20	9x		
Old North Utilities Services/Ft. Bragg	Fort Bragg	65,000	3.2 (2013-2014) <sup>21</sup>	9x		
City of Dunn	Dunn	11,747	2.95 (2015)22	8x		
Pender County Utilities	Pender County	15,138	2.41 (2015) <sup>23</sup>	7x		
Brunswick County Water System	Leland and adjacent communities	77,891	2.02 (2014-2015) <sup>24</sup>	6x		
PENNSYLVANIA						
Beaver Falls Municipal Authority	Beaver Falls	50,000	2.66 (2013-2014) <sup>25</sup>	8x		

Source: EWG's Tap Water Database information for water systems serving over 10,000 people. Details of the analysis are described in the methodology section of this report. Some water systems listed in this table supply or have supplied finished drinking water to other water systems. The purchasing system is not required to test for or report 1,4-dioxane, but likely has carried the contaminant into its water supply.

- 1. The 2016 Consumer Confidence Report for Cudahy/Tract 180 Mutual Water Company reports an average of 5.2 ppb of 1,4-dioxane for 2014 to 2016 testing. Available at drinc.ca.gov/ear/CCR/CCR2016CA1910159.pdf
- 2. The 2016 Consumer Confidence Report for East Los Angeles District of California Water Service Company reports an average of 3.9 ppb of 1,4-dioxane for 2015 to 2016 testing. Available at drinc.ca.gov/ear/CCR/CCR2016CA1910036.pdf
- 3. The 2016 Consumer Confidence Report for Bellflower Somerset Mutual Water Company reports an average of 3.2 ppb of 1,4-dioxane for 2014 to 2016 testing. Available at drinc.ca.gov/ear/CCR/CCRC2016CA1910013.pdf
- 4. The 2016/2017 Consumer Confidence Report for Bellflower/Norwalk system reports an average of 2.7 ppb of 1,4-dioxane for 2015 testing. Available at drinc.ca.gov/ear/CCR/CCR2016CA1910211.pdf
- 5. The 2016 Consumer Confidence Report for the City of Norwalk system reports an average of 3.7 ppb of 1,4-dioxane for 2014 to 2016 testing of the city's groundwater source. The City of Norwalk combines this groundwater with surface water purchased from Metropolitan Water District of Southern California, which would result in dilution of 1,4-dioxane contamination in the final finished water served to customers. Available at drinc.ca.gov/ear/CCR/CCR2016CA1910191.pdf

- 6. The 2016 Consumer Confidence Report for the City of Lynwood system reports an average of 2.7 ppb of 1,4-dioxane for 2014 to 2016 testing of the city's groundwater source. The City of Lynwood combines this groundwater with surface water purchased from Metropolitan Water District of Southern California, which would result in dilution of 1,4-dioxane contamination in the final finished water served to customers. Available at drinc.ca.gov/ear/CCR/CCR2016CA1910079.pdf
- 7. The 2016 Consumer Confidence Report for Mesa Water District reports an average of 1.4 ppb of 1,4-dioxane for 2015 testing and describes "treated wastewater" as the source of 1,4-dioxane in drinking water. The utility reported higher average levels for preceding years: 2 ppb (2014); 2.4 ppb (2013); 2.7 ppb (2012); 2.6 ppb (2011). Averaging all sample points reported by the Mesa Water District for 2010 to 2015 produces a result of 3.29 ppb, as shown in EWG's Tap Water Database (www.ewg.org/tapwater/system.php?pws=CA3010004). Utility CCR available at drinc.ca.gov/ear/CCR/CCR2015CA3010004.pdf
- 8. According to information published by this water utility and described in news reports, since April 2015, the City of New Brighton has discontinued the use of shallow ground water wells in which 1,4-dioxane was detected. Subsequently, New Brighton switched to using water from deeper, 1,4-dioxane-free wells and then changed its primary water source to Minneapolis Water via an interconnection pipeline. Available at www.newbrightonmn.gov//wp-content/uploads/2016/08/2016-Consumer-Confidence-Report-Water-testing-in-2015.pdf
- 9. The 2016 Consumer Confidence Report for the City of Camden, published by the city water operator, American Water Contract Services, reports an average of of 2.77 ppb of 1,4-dioxane for the Parkside Water Treatment Plant and an average of 0.86 ppb of 1,4-dioxane for the Morris-Delair Water Treatment Plant. Available at amwater.com/corp/products-services/contract-services/camden
- 10. EWG was unable to find the 2013/2014 Consumer Confidence Report for this utility online. The 2016 Consumer Confidence Report for this utility (PWS ID NJ1505002), accessible on the AquaAmerica website, does not mention 1,4-dioxane. Available at www.aquaamerica.com/customer-service-center/water-quality.aspx
- 11. The 2017 Consumer Confidence Report for the Merchantville-Pennsauken Water Commission reports a range of 1,4-dioxane detection for testing in 2016 as 0.28 to 8.22 ppb, consistent with test results in the EWG database for 2014 to 2015, 0.36-5.6 ppb. Utility CCR available at mpwc.com/water-quality/water-quality-report-ccr/
- 12. The Bethpage Water District 2016 Consumer Confidence Report lists a range of 1,4-dioxane detection for testing in 2016 as 2.1 to 12 ppb, consistent with test results in the EWG database for 2013, 0.31 to 8.5 ppb. Utility CCR available at bethpagewater. com/Water-Quality
- 13. According to information published by this water utility and described in news reports, since January 2015, Hicksville Water District has discontinued use of the well with the highest levels of 1,4-dioxane (up to 33 ppb, as reported in 2013). Available at hicksvillewater.org/?p=1362
- 14. The 2017 Consumer Confidence Report for the Village of Hempstead (Public Water Supply ID# 2902827) reports an average of 2 ppb of 1,4-dioxane for 2013 testing. Available at www.villageofhempstead.org/DocumentCenter/Home/View/1100
- 15. The 2017 Consumer Confidence Report for the Plainview Water District reports a range of 0.59 to 5.8 ppb of 1,4-dioxane for 2014 testing. Available at www.plainviewwater.org/Water\_Quality.html
- 16. The 2017 Consumer Confidence Report for the Town of Hempstead (Public Water Supply ID# 2900000) reports a range of tests for 1,4-dioxane from non-detected to 10 ppb for 2014 testing. Available at toh.li/water-department/drinking-water-quality-reports
- 17. According to annual water quality reports published by the City of Sanford, average 1,4-dioxane level in 2013 was 6.4 ppb; a level of 4 ppb was measured in 2014. Available at www.sanfordnc.net/543/Annual-Water-Quality-Report
- 18. According to information published by the Fayetteville Public Works Commission in the 2016 Water Quality Report, lower average levels of 1,4-dioxane were detected in 2015 (2.5 ppb) and 2016 (1.4 ppb), compared to 2013; however, these average levels continued to exceed the EPA's negligible risk level of 0.35 ppb. Available at www.faypwc.com/water-quality-report/
- 19. According to water quality reports published by the Harnett County Public Utilities 1,4-dioxane measurements of 2.5 and 4.4 ppb were detected in 2014; and measurements of 2.5 and 4.8 ppb were detected in 2015. Available at www.harnett.org/utilities/
- 20. According to information published by the town of Holly Springs, this community purchases drinking water from Harnett County. Holly Springs annual drinking water quality report lists measurements of 1.9 ppb and 3.65 ppb of 1,4-dioxane, for tests done in 2014 and 2015. Available at www.hollyspringsnc.us/220/Water-Testing
- 21. Old North Utility Services 2016 annual water quality report lists average level of 2.39 ppb for 1,4-dioxane, with a range of measurements from non-detected to 4.2 ppb for tests performed in 2014. Available at www.asusinc.com/images/uploads/bases\_we\_serve/NC001299-1\_WR.PDF
- 22. EWG was unable to find the 2015 water quality report for the City of Dunn online; the 2016 annual water quality report for this water system does not mention 1,4-dioxane. Available at www.dunn-nc.org/works/water-treatment-plant-615.asp
- 23. The 2015 water quality reports for Pender County utilities do not mention 1,4-dioxane. Available at www.pendercountync.gov/utl/
- 24. The County of Brunswick 2015 water quality report lists a detection of 3.2 ppb for 1,4-dioxane. Available at http://www.brunswickcountync.gov/utilities/reports/
- 25. Beaver Falls Municipal Authority reported an average level of 3.2 ppb of 1,4-dioxane for testing in 2013 (available at bfwater. net/BFWaterreport2014.pdf) and an average level of 2.668 ppb of 1,4-dioxane for all test results in 2013 and 2014 (available at bfwater.net/BF-WaterReport2014.pdf).