

January 1, 2012

EPA uses the Unregulated Contaminant Monitoring Regulation (UCMR) program to collect data for contaminants suspected to be present in drinking water, but that do not have health-based standards set under the Safe Drinking Water Act (SDWA). Every five years EPA reviews the list of contaminants, largely based on the Contaminant Candidate List. The SDWA Amendments of 1996 provide for:

- Monitoring no more than 30 contaminants per 5-year cycle
- Monitoring only a representative sample of public water systems serving less than 10,000 people
- Storing analytical results in a National Contaminant Occurrence Database (NCOD)

This dataset represents the last NCOD release of analytical results for UCMR 2. For more information about UCMR2, please visit our website:

<http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr2/index.html>

UCMR 2 Data Considerations

- This dataset is complete.
- Data are presented as four method-specific text files (UCMR2_521.txt, UCMR2_525_2_and_535.txt, UCMR2_527.txt, UCMR2_529.txt), and one text file containing all UCMR 2 data (UCMR2_All.txt).
- Samples collected at the maximum residence time in the distribution system (MR) are required to be analyzed only for nitrosamines using Method 521.
- Extra data were submitted but not required are included.
- Disinfectant type is only required for Method 521 data.
- Population categories are based on total population (retail plus wholesale) as of June 30, 2005.
- These text files are tab delimited and have no text qualifier. Field names are included in the first row of each file.
- EPA suggests you import each field into your choice of software as text. Some of the IDs can be misinterpreted as long integer field types when they actually contain alpha characters.

UCMR 2 Data Field Names and Definitions

Field Name	Definition	
PWSID	Public Water System Identification Code, 9 character identification code	
PWSName	Public Water System Name, name of the public water system (PWS)	
Size	Size category of the PWS for UCMR, based on total population as of June 30, 2005	
	VS	<500
	S	501-3300
	M	3301-10000
	L	10001-50000
	VL	50001-100000
	XL	>100000
FacilityID	Public Water System Facility Identification Code, 5 digit identification code	
FacilityName	Name of the facility at the PWS	
FacilityWaterType	Source of water at the facility	
	SW	surface water
	GW	ground water
	GU	ground water under the direct influence of surface water
	MX	mixed
SamplePointID	Identification code up to 15 characters for each sample point at the PWS	
SamplePointName	Name of the sample point at the facility at the PWS	
SamplePointType	Sampling Point Type Code	
	EP	entry point to the distribution system
	MR	maximum residence time in the distribution system (screening survey facilities only)

Field Name	Definition	
AssociatedFacilityID	Maximum residence time facility ID associated with the entry point facility (screening survey facilities only)	
AssociatedSamplePointID	Maximum residence time sample point ID associated with the entry point ID sample point (screening survey facilities only)	
DisinfectantType	This information exists for screening survey facilities only.	
	CL	chlorine
	CA	chloramine
	OT	other
	ND	no disinfectant used
CollectionDate	Date of sample collection (month, day, year)	
SampleID	Identification code up to 30 characters for each sample, as defined by the laboratory	
Contaminant	Common name for analyte monitored under UCMR2	
MRL	Minimum reporting level defined by UCMR2	
MethodID	Identification code of the analytical method	
AnalyticalResultsSign	Less than (<) the minimum reporting requirement (MRL) or equal to (=) a numeric value at or above the MRL	
AnalyticalResultValue	Numeric value of the analytical result (ppb). Null values represent less than MRL.	
SampleEventCode	Identification code for each sample event. Includes sample event one (SE1), sample event two (SE2), sample event three (SE3), and sample event four (SE4). GW systems report only SE1 and SE2.	
MonitoringRequirement	AM	Assessment Monitoring (List 1)
	SS	Screening Survey (List 2)
Region	EPA Region	States
	1	CT, ME, MA, NH, RI, VT
	2	NJ, NY, PR (Puerto Rico), VI (Virgin Islands)
	3	DE, DC, MD, PA, VA, WV
	4	FL, FL, GA, KY, MS, NC, SC, TN

Field Name	Definition	
	5	IL, IN, MI, MN, OH, WI
	6	AR, LA, NM, OK, TX
	7	IA, KS, MO, NE
	8	CO, MT, ND, SD, UT, WY
	9	AZ, CA, HI, NV, AS (American Samoa), GU (Guam), MP (Northern Marianas Islands), NN (Navajo Nation)
	10	AK, ID, OR, WA
State	Two character postal code referring to a state or a two digit numeric code referring to tribal systems within that Region.	

UCMR 2 Contaminants and Methods

Contaminant	Contaminant Full Name	CAS ¹ Number	Method ID	Method Name	Monitoring Requirement
Dimethoate	Dimethoate	60-51-5	EPA 527	Pesticides and Flame Retardants	AM
Terbufos sulfone	Terbufos sulfone	56070-16-7	EPA 527	Pesticides and Flame Retardants	AM
BDE-47	2,2',4,4'-tetrabromodiphenyl ether	5436-43-1	EPA 527	Pesticides and Flame Retardants	AM
BDE-99	2,2',4,4',5-pentabromodiphenyl ether	60348-60-9	EPA 527	Pesticides and Flame Retardants	AM
BDE-153	2,2',4,4',5,5'-hexabromodiphenyl ether	68631-49-2	EPA 527	Pesticides and Flame Retardants	AM
BDE-100	2,2',4,4',6-pentabromodiphenyl ether	189084-64-8	EPA 527	Pesticides and Flame Retardants	AM
HBB	2,2',4,4',5,5'-hexabromobiphenyl	59080-40-9	EPA 527	Pesticides and Flame Retardants	AM
TNT	2,4,6-trinitrotoluene	118-96-7	EPA 529	Explosives and Related Compounds	AM
1,3-dinitrobenzene	1,3-dinitrobenzene	99-65-0	EPA 529	Explosives and Related Compounds	AM
RDX	Hexahydro-1,3,5-trinitro-1,3,5-triazine	121-82-4	EPA 529	Explosives and Related Compounds	AM
Acetochlor	Acetochlor	34256-82-1	EPA 525.2	Acetanilide Pesticide Parent	SS
Alachlor	Alachlor	15972-60-8	EPA 525.2	Acetanilide Pesticide Parent	SS
Metolachlor	Metolachlor	51218-45-2	EPA 525.2	Acetanilide Pesticide Parent	SS
Acetochlor ESA	Acetochlor ethane sulfonic acid	187022-11-3	EPA 535	Acetanilide Pesticide Degradation Products	SS
Acetochlor OA	Acetochlor oxanilic acid	184992-44-4	EPA 535	Acetanilide Pesticide Degradation Products	SS
Alachlor ESA	Alachlor ethane sulfonic acid	142363-53-9	EPA 535	Acetanilide Pesticide Degradation Products	SS
Alachlor OA	Alachlor oxanilic acid	171262-17-2	EPA 535	Acetanilide Pesticide Degradation Products	SS
Metolachlor ESA	Metolachlor ethane sulfonic acid	171118-09-5	EPA 535	Acetanilide Pesticide Degradation Products	SS
Metolachlor OA	Metolachlor oxanilic acid	152019-73-3	EPA 535	Acetanilide Pesticide Degradation Products	SS
NDEA	N-nitroso-diethylamine	55-18-5	EPA 521	Nitrosamines	SS
NDMA	N-nitroso-dimethylamine	62-75-9	EPA 521	Nitrosamines	SS
NDBA	N-nitroso-di-n-butylamine	924-16-3	EPA 521	Nitrosamines	SS
NDPA	N-nitroso-di-n-propylamine	621-64-7	EPA 521	Nitrosamines	SS
NMEA	N-nitroso-methylethylamine	10595-95-6	EPA 521	Nitrosamines	SS
NPYR	N-nitroso-pyrrolidine	930-55-2	EPA 521	Nitrosamines	SS

¹Chemical Abstracts Service

January 1, 2012 UCMR 2 Data Summary

Contaminant	MRL ¹	Number of analyses	Number of PWS with analyses	Number of detections >MRL	Number of PWS with detects	Minimum detection ¹	Maximum detection ¹	Average detection ¹	Median detection ¹
Dimethoate	0.7	32150	4140	0	0				
Terbufos sulfone	0.4	32149	4140	1	1	0.42	0.42	0.42	0.42
BDE-47	0.3	32149	4140	0	0				
BDE-99	0.9	32149	4140	0	0				
BDE-153	0.8	32139	4140	0	0				
BDE-100	0.5	32149	4140	0	0				
HBB	0.7	32143	4140	0	0				
TNT	0.8	32151	4139	0	0				
1,3-dinitrobenzene	0.8	32152	4139	0	0				
RDX	1.0	32150	4139	4	3	1.0	1.1	1.1	1.1
Acetochlor	2.0	11193	1198	0	0				
Alachlor	2.0	11193	1198	0	0				
Metolachlor	1.0	11192	1198	3	3	1.2	2.7	1.8	1.4
Acetochlor ESA	1.0	11157	1198	2	2	1.1	1.2	1.2	1.2
Acetochlor OA	2.0	11157	1198	0	0				
Alachlor ESA	1.0	11156	1198	5	3	1.0	1.3	1.2	1.2
Alachlor OA	2.0	11157	1198	0	0				
Metolachlor ESA	1.0	11157	1198	52	19	1.0	4.0	1.7	1.4
Metolachlor OA	2.0	11157	1198	3	1	2.5	3.5	3.0	3.1
NDEA	0.005	18096	1198	46	26	0.005	0.100	0.015	0.007
NDMA	0.002	18098	1198	1861	324	0.002	0.630	0.009	0.004
NDBA	0.004	18101	1198	9	5	0.004	0.021	0.008	0.007
NDPA	0.007	18107	1198	0	0				
NMEA	0.003	18101	1198	3	3	0.004	0.005	0.004	0.004
NPYR	0.002	18107	1198	41	21	0.002	0.024	0.005	0.004

¹ Measured in µg/L (ppb)