UCMR 2: Fact Sheet for Assessment Monitoring of List 1 Contaminants

United States Environmental Protection Agency

Overview of the Rule	
Title	Unregulated Contaminant Monitoring Regulation (UCMR) for Public Water Systems (PWSs) Revisions
Purpose	To collect occurrence 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. Assessment Monitoring targets contaminants that are analyzed with methods that utilize existing and widely used technology. The UCMR monitoring program is the primary source of drinking water contaminant occurrence data used by EPA in regulatory determinations.
General Description	The second cycle of the revised UCMR (UCMR 2) includes Assessment Monitoring (List 1) for 10 contaminants using 2 analytical methods. PWSs subject to Assessment Monitoring will sample within a twelve month period during 2008 - 2010. Monitoring results for PWSs serving over 10,000 people are reported to EPA's UCMR electronic data reporting system (i.e., the Safe Drinking Water Accession and Review System [SDWARS].)
Utilities Covered	Community water systems (CWSs) and non-transient non-community water systems (NTNCWSs) that serve a total population of more than 10,000 people and a representative sample of 800 systems serving 10,000 or fewer people are required to conduct Assessment Monitoring.

UCMR 2 List 1 Contaminants

Contaminant and CAS[1] Registry Number	MRL[2] (µg/L)	Use or Environmental Source	Health Effects[3]
2 Priority Compounds (1 insecticide and 1 insecticide degradate), by EPA Method 527			
Dimethoate 60-51-5	0.7	Insecticide used on cotton and other field crops, orchard crops, vegetable crops, in forestry, and for residential uses	EPA classified as a "possible human carcinogen," with a reference does (RfD) of 0.0002 milligrams per kilogram per day (mg/kg/day)
Terbufos sulfone 56070-16-7	0.4	Degradate of the parent compound, terbufos; terbufos used for systemic control of soil-borne insects and nematodes in fields of corn, grain sorghum, and sugar beets	EPA derived chronic RfD of 0.00005 mg/kg/day for the parent compound, based on no observed adverse effect level for plasma cholinesterase inhibition
5 Flame Retardants, by EPA Method 527			
2,2',4,4'-tetrabromodiphenyl ether (BDE-47) 5436-43-1	0.3	Flame retardants added to plastics (for products such as computer monitors, televisions, textiles, and plastic foams)	Animal studies suggest thyroid and liver effects, as well as possible reduced immune system function and neurobehavioral alteration
2,2',4,4',5-pentabromodiphenyl ether (BDE-99) 60348-60-9	0.9		
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153) 68631-49-2	0.8		
2,2',4,4',6-pentabromodiphenyl ether (BDE-100) 189084-64-8	0.5		
2,2',4,4',5,5'-hexabromobiphenyl (HBB) 59080-40-9	0.7	Flame retardant additive; production of polybrominated biphenyls ended in 1976 in U.S. after an incident of significant accidental agricultural contamination in 1973	
3 Explosives, by EPA Method 529			
2,4,6-trinitrotoluene (TNT) 118-96-7	0.8	Used as an explosive in bombs and grenades, also used as a propellant; small amounts used for industrial explosive applications, such as deep well and underwater blasting; chemical intermediate in manufacture of dyestuffs and photographic chemicals	EPA classified as possible human carcinogen (Group C) based on urinary bladder papilloma and carcinoma in female rats and activity in Salmonella, with and without metabolic activation
1,3-dinitrobenzene 99-65-0	0.8	Used in explosives; also formed as a by-product during the manufacture of the explosive TNT; used in the manufacture of aramid fibers, spandex, and dyes	EPA derived chronic oral RfD of 0.0001 mg/kg/day, based on increased spleen weight
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) 121-82-4	1.0	Used in detonators, primers, mines, rocket boosters, and plastic explosives; used in fireworks and demolition blocks, and as a rodenticide	EPA derived chronic oral RfD of 0.0003 mg/kg/day, based on prostate inflammation observed in rats in a 2-year feeding study, and has classified RDX as a possible human carcinogen (Group C), based on adenomas and carcinomas in female mice

[1] Chemical Abstracts Service
[2] Minimum reporting level
[3] Unregulated Contaminant Monitoring Regulation (UCMR) for Public Water Systems Revisions; Proposed Rule. Fed. Reg. Vol. 70, No. 161. p. 49093, August 22, 2005.

Monitoring

	Groundwater	Surface Water or Groundwater Under the Direct Influence of Surface Water (GUDI)
Time frame	One consecutive 12-month period during January 2008 - December 2010.	
Frequency	Monitoring will occur twice in a consecutive 12-month period. Sample events must occur 5 - 7 months apart.	Monitoring will occur in 4 consecutive quarters, with sampling events occurring 3 months apart. Therefore, a system could conduct monitoring in either: (1) January, April, July, October; (2) February, May, August, November; or (3) March, June, September, December.
	EPA will assign a monitoring schedule; however, PWSs have the opportunity to change this schedule prior to the onset of monitoring.	
Location	Entry point to the distribution system.	
Laboratories	Samples must be analyzed by EPA-approved laboratories. EPA-approved laboratories will be listed on the UCMR Web site at http://www.epa.gov/safewater/ucmr/ucmr2/labs.html.	

Critical Deadlines and Requirements

Due Date	Requirement	Report through SDWARS[1]	Contact UCMR Sampling Coordinator[2]
Following Rule Publication			
Within 90 days of rule publication	Systems must submit contact information to SDWARS. (Any subsequent changes must be submitted within 30 days of the change.)	X	
	Laboratories wanting to be approved must submit a registration form to participate in the laboratory approval process. For more information see: http://www.epa.gov/safewater/ucmr/ucmr2/labs.html.		X
Within 120 days of rule publication	Groundwater systems that wish to monitor from representative EPTDSs must submit either approval documentation or proposed alternate sampling plan.		X
Within 210 days of rule publication	Deadline for systems to change their monitoring schedule (after 210 days systems must provide an explanation for the requested schedule change).	X	X (after 210 days)
	PWSs review, and edit if necessary, inventory information for sampling locations.	X	X (after 210 days)
Following Sample Collection			
Within 120 days of sample collection	Laboratories post data to SDWARS.	X	
Within 60 days of laboratory posting of data	PWSs review and approve the data. If after 60 days the PWS has not taken action, the data are considered approved and ready for concurrent State and EPA review.	X	

[1] Accessed through http://www.epa.gov/safewater/ucmr/ucmr2/reporting.html
[2] Contact via e-mail at: UCMR_Sampling_Coordinator@epa.gov

UCMR 2 List 1 Data Elements

PWS Identification (PWSID)	Sample Collection Date	Analytical Result - Sign
PWS Facility Identification	Sample Identification	Analytical Results - Value
Water Source Type	Contaminant	Laboratory Identification
Sample Point Identification	Analytical Method	Sample Event
Sample Point Type	Sample Analysis Type	

Consumer Confidence Report

Under the Consumer Confidence Report (CCR) Rule, as specified in 40 CFR §141.153(d), CWSs must report the monitoring results whenever unregulated contaminants are detected. CCRs are to be sent to all billing customers each year by July 1. (The CCR Rule does not apply to non-community water systems.) Details on these reporting requirements can be found on the CCR Home Page at: http://www.epa.gov/safewater/ccr/index.html

For More Information....

Contact	Telephone
UCMR Message Center	800 - 949 - 1581
Safe Drinking Water Hotline	800 - 426 - 4791
CDX/SDWARS Help Desk	888 - 890 - 1995

Public Notification Rule

The Public Notification Rule (40 CFR §141.207), published on May 4, 2000 (65 FR 25981), requires PWSs to notify the public annually that the results of monitoring for unregulated contaminants are available (includes both CWSs and NTNCWSs). CWSs may include their public notice within their CCRs. Details on these reporting requirements can be found in the document: Public Notification Handbook (EPA 816-R-00-010), available on EPA's Web site at: http://www.epa.gov/safewater/pws/pn/handbook.pdf.