



MWH[®]
LABORATORIES

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UCMR3 FACT SHEET

For Utilities serving >10,000 retail population



Key dates?

- Representative Sample Plans (Groundwater Systems) are due **August 1, 2012**.
- Sample Inventory Location and Schedule updates (all Systems) are due **October 1, 2012**.
- Sampling may commence on **January 1, 2013**.
- All monitoring must be completed by **December 31, 2015**.

Who must monitor?

Any systems (including 100% consecutive systems) serving a retail population of >10,000 must monitor for List 1 (Assessment Monitoring). All very large systems (>100,000 retail population) must also monitor for List 2 (Screening Survey). A randomly selected set of 320 large systems (>10,000 retail population) must also monitor for List 2. Retail population is based on what is in the Safe Drinking Water Information System (SDWIS/Fed) as of December 31, 2010. If your agency has not yet received your UCMR3 Customer Retrieval Key (CRK) letter which provides Safe Drinking Water Accession and Review System (SDWARS) access to see your specific requirements and schedule you should contact EPA.

What must be monitored?

Assessment Monitoring (List 1) includes 21 compounds listed in six (6) individual EPA methods (200.8, 218.7, 300.1, 522, 524.3, and 537). Screening Survey Monitoring (List 2) includes 7 natural and synthetic hormones (EPA method 539). A complete summary of the methods, reporting limits and required sample locations is shown in the table.

Where do you monitor?

All entry points to the distribution system (EPTDS) must be sampled. Additionally, samples must also be collected at the Distribution System Maximum Residence Time (DSMRT) for metals (200.8), hexavalent chromium (218.7), and chlorate (300.1). The DSMRT location should be your farthest point relative to the EPTDS, which is usually your highest Stage 2 TTHM sample location. EPA's SDWARS database has been pre-populated with these sample locations. Systems may review and edit this information in SDWARS up until October 1, 2012.

What if you buy water from a wholesaler and have multiple turnouts?"

You can sample at a representative turnout (for any number of connections to the same source), rather than sampling at all turnouts, but you must choose the turnout with the highest volume at the entry point. If that turnout is not operating at the time of scheduled sampling you must sample an alternate turnout.

Can you use representative samples if you are a groundwater system with multiple entry points?

If you already had a "representative sampling plan" in place for your UCMR2 monitoring, those sites have been pre-loaded into SDWARS by EPA and are (by default) approved for use in UCMR3. If you want to edit your existing representative sampling plan, you must submit your proposed new plan to EPA by August 1, 2012. When identifying a representative well, the well must be representative of the highest producing (based on annual volume) and most consistently active wells. In addition, the representative well must be in use at the scheduled sampling time. An alternative location must be sampled if the representative EPTDS is not available at the time of scheduled sampling.

When and how often do you monitor?

Monitoring must commence on or after January 1, 2013 and conclude by December 31, 2015. EPA has pre-populated SDWARS with your designated start date. However, you may modify your own schedule to meet your particular operational or budgetary constraints anytime before October 1, 2012. Groundwater systems must sample twice in one year, 5-7 months apart. Surface water systems (or GWUI systems) must monitor quarterly for one year. For the second and subsequent sampling events, if the designated sample location is non-operational for 1 month before or after the scheduled sampling, the water system must contact EPA to establish a revised sample schedule.

How do you select a laboratory?

EPA will shortly publish a list of all approved laboratories. Approved laboratories will undergo ongoing audits by EPA to retain approval. Only **EPA Approved** laboratories may perform UCMR3 compliance analysis. MWH (CA00006) is fully approved for all UCMR3 required methods. See http://www.mwhlabs.com/files/certs/UCMR3_Lab_Approval.pdf

What about field blanks?

Because of the low reporting limits, four analytical methods (metals by 200.8, volatiles by 524.3, perfluorinated compounds by 537 and hormones by 539) require the collection of a field blank with EACH sample to verify that any detects are not the result of field contamination. Based on guidance from EPA, the laboratory will provide specific instructions for how to collect the field blank, which differs from method to method. If any analytes are detected in a sample, the field blank must also be analyzed, and if there are any detects in that field blank, the sample results will be considered invalid and will require re-collection.

When do you report your results to EPA?

Labs have 120 days after sampling to post results. Once posted, the water system will receive notification electronically to review and approve the data submitted by the laboratory. You then have 60 days after posting to approve the data. If no action is taken within the 60 days, the data will automatically be uploaded to the National Contaminant Occurrence Database (NCOD).

What else do you need to report?

There are a number of pieces of information in addition to lab results that must be reported. Many of these will be reported by the laboratory (e.g. sample event code, sample date, analysis date, etc). However there are some that you must report, including all disinfectant type(s) being used for EACH sampling point (there are numerous choices), the sample location type (EPTDS or DSMRT), facility ID, sample point ID, and water source type. Many of these (except the disinfectant information) can be pre-populated in the database to streamline your data entry. There are also some one time reporting requirements (e.g. zip codes for all customers, contact information, etc.).

Analyte	Method	Reporting Limit (ug/L)	EPTDS	DSMRT	Field Blank
List 1 (Assessment Monitoring)					
1,2,3-trichloropropane	EPA 524.3	0.03	✓		✓
1,3-butadiene	EPA 524.3	0.1	✓		✓
chloromethane (methyl chloride)	EPA 524.3	0.2	✓		✓
1,1-dichloroethane	EPA 524.3	0.03	✓		✓
bromomethane (methyl bromide)	EPA 524.3	0.2	✓		✓
chlorodifluoromethane (HCFC-22)	EPA 524.3	0.08	✓		✓
bromochloromethane (halon 1011)	EPA 524.3	0.06	✓		✓
1,4-Dioxane	EPA 522	0.07	✓		
vanadium	EPA 200.8	0.2	✓	✓	✓
molybdenum	EPA 200.8	1	✓	✓	✓
cobalt	EPA 200.8	1	✓	✓	✓
strontium	EPA 200.8	0.3	✓	✓	✓
chromium	EPA 200.8	0.2	✓	✓	✓
chromium-6	EPA 218.7	0.03	✓	✓	
chlorate	EPA 300.1	20	✓	✓	
perfluorooctanesulfonic acid (PFOS)	EPA 537	0.04	✓		✓
perfluorooctanoic acid (PFOA)	EPA 537	0.02	✓		✓
perfluorononanoic acid (PFNA)	EPA 537	0.02	✓		✓
perfluorohexanesulfonic acid (PFHxS)	EPA 537	0.03	✓		✓
perfluoroheptanoic acid (PFHpA)	EPA 537	0.01	✓		✓
perfluorobutanesulfonic acid (PFBS)	EPA 537	0.09	✓		✓
List 2 (Screening Monitoring)					
17-β-estradiol	EPA 539	0.0004	✓		✓
17-α-ethynylestradiol (ethinyl estradiol)	EPA 539	0.0009	✓		✓
16-α-hydroxyestradiol (estriol)	EPA 539	0.0008	✓		✓
equilin	EPA 539	0.004	✓		✓
estrone	EPA 539	0.002	✓		✓
testosterone	EPA 539	0.0001	✓		✓
4-androstene-3,17-dione	EPA 539	0.0003	✓		✓



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