Questions/Answers from the Unregulated Contaminant Monitoring Rule (UCMR 4) Public Stakeholder Meeting and Webinar on April 12, 2017

This document summarizes the questions that were asked during the meeting and webinar. EPA answered many of the questions during the meeting/webinar, and has documented those answers below. Some of the initial answers have been edited or expanded upon for clarity/accuracy/completeness. Questions not addressed during the meeting have also been addressed below. Similar questions have been paraphrased and grouped to avoid duplication. For questions about a system's specific circumstances, contact the UCMR Sampling Coordinator at UCMR Sampling Coordinator@epa.gov.

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I. Sampling Design

Q: Has EPA determined which water systems will be monitored under a Screening Survey (for List 2 contaminants) and/or Pre-Screen Testing (for List 3 contaminants)? When will they be notified of that requirement?

A: UCMR 4 only includes Assessment Monitoring (for List 1 contaminants) which must be conducted by all large community water system (CWSs) and non-transient non-community water systems (NTNCWS) serving more than 10,000 people. UCMR 4 also includes a nationally representative sample of 1,600 small water systems. 800 small public water systems (PWSs) (serving 10,000 or fewer people) served by surface water (SW) or ground water under the influence (GWUDI) of surface water sources will monitor for 10 cyanotoxins. A different set of 800 small PWSs served by SW, GWUDI, and ground water (GW) will monitor for the 20 additional contaminants. These large and small systems have been notified that

UCMR 4 is applicable to them. There are no Screening Survey or Pre-Screen Testing requirements for UCMR 4.

Q: Our water system has less than 7,000 connections. Our concern is that we have been picked as a "representative small system" for monitoring during multiple UCMR cycles.

A: For each UCMR cycle, EPA performs a random selection of representative small PWSs to participate. Small PWSs selected for a particular UCMR cycle are not precluded from being selected for a future cycle(s), though we note that with ~64,000 small CWSs and NTNCWSs, the likelihood of a system being selected for multiple cycles is relatively low.

To satisfy the specifications of Safe Drinking Water Act (SDWA) section 1445(a)(2)(A), the representative sample of small PWSs that will participate in UCMR 4 Assessment Monitoring accounts for different PWS sizes, sources of water supply and geographic location (e.g., states). The sample is stratified by water source type (i.e., GW, or SW and GWUDI) and by PWS size category (i.e., serves 25 to 500 people, 501 to 3,300 people, etc.). This stratification allows EPA to account for different exposure risks of contaminant occurrence that could be related to the vulnerability differences between SW and GW sources and differing technical, managerial, and/or financial capacity that can vary across PWS sizes.

The small PWSs are also selected in proportion to the population served. This population-weighted allocation leads to statistically valid estimates of national exposure. To ensure the sample provides equity across states for involvement in the UCMR, EPA includes at least two small PWSs from each state. This additional PWS selection requirement provides allocation across all the states, and territories to account for differences in spatial vulnerability and contaminant occurrence, and to ensure equity in participation. Small tribal PWSs across the EPA regions are expected to be grouped into a single category (equivalent to a "state"), for the representative sample.

EPA attempts to minimize the burden on small PWSs by paying for all shipping and analytical costs for water systems that serve 10,000 or fewer people.

Q: Why are the same large water systems tasked with the expense of sampling for these unregulated contaminants? Taken over the life of this decree, thousands of dollars are spent which could be going to our infrastructure.

A: The Unregulated Contaminant Monitoring Rule established a national drinking water occurrence program mandated by the 1996 amendments to the Safe Drinking Water Act (SDWA). Consistent with prior UCMR cycles, UCMR 4 requires that Assessment Monitoring be conducted by all large community water system (CWSs) and non-transient non-community water systems (NTNCWS) serving more than 10,000 people. UCMR 4 also identifies a nationally representative sample of 800 small PWSs (serving 10,000 or fewer people) to monitor for 10 cyanotoxins and a different set of 800 small PWSs to monitor for the 20 additional contaminants. For additional information on the UCMR statistical approach, see "Statistical Design and Sample Selection for the Unregulated Contaminant Monitoring Regulation" (EPA 815-R-01-004, August 2001).

Q: The 1996 SDWA amendments require EPA to issue a new list of no more than 30 unregulated contaminants for monitoring once every five years. On the web, there is a list of 32 UCMR 4 contaminants. This includes the two chemical indicators (TOC and bromide). Please explain why these are not included in the total count.

A: SDWA sections 1445(a)(1)(A) and 1445(a)(2) allow the agency to develop a sampling design that will provide the information needed to make regulatory determinations, and develop future strategies to

protect public health. Occurrence data on total organic carbon (TOC) and bromide (Br) are not being collected under UCMR 4 to assess their occurrence, per se, or to gather data to support a regulatory determination for the two parameters. Rather, occurrence data on TOC and Br are being collected and evaluated to understand the potential relationship between these two "indicators" and a group of UCMR 4 contaminants, brominated haloacetic acids (HAAs). Disinfection byproducts (DBPs), such as HAAs, are formed during water treatment and distribution, through reactions between disinfectants and DBP precursors (such as TOC and Br). Collecting data on TOC and Br may help the agency understand brominated HAA formation and treatment strategies for HAA control. In a similar way, UCMR 3 included the collection of data for various microbiological "indicators" concurrent with studying two viruses of interest.

II. UCMR 4 Sample Collection and Frequency

Q: Which monitoring schedule should we follow if the entry point (EP) has a combination of GW and GWUDI well sources?

A: If the entry point to the distribution system (EPTDS) relies on a combination of GW and GWUDI, the system must follow the sampling frequency for GWUDI systems.

Q: If water systems have both GW and SW sources that are blended, are they considered a SW system?

A: Yes, this system is considered a SW system and should follow the monitoring requirements for SW sources.

Q: If a primarily GW system also receives SW from a consecutive connection, what schedule would the system be on?

A: This system would follow the SW system schedule, presuming that the GW and treated SW are blended prior to the entry point to the distribution system. If the two sources have independent entry points, the two points should be monitored independently as GW and SW systems, following the respective schedules for each.

Q: What monitoring is required of a large PWS that uses only purchased treated SW, but the PWS still has standby/active wells that are not active unless drought conditions exist?

A: This system should monitor all active sources on the SW schedule. Emergency sources are not subject to UCMR.

Q: We are a water wholesaler. For UCMR 3, we selected entry points for each consecutive community. We intend to use those sample locations (assuming they are still available) for UCMR 4 entry point locations. Is that acceptable? Where there are multiple EPs within a community, must the EP be the highest annual water flow site, even though it might be different than used in UCMR 3?

A: Yes, using the same entry points for UCMR 3 and UCMR 4 are acceptable, assuming the sampling points still represent the highest-volume locations. Systems that purchase water with multiple connections from the same wholesaler may select one representative connection from that wholesaler, as specified in 40 CFR 141.40(a)(3) Table 1, footnote c. This EPTDS sampling location must be representative of the highest annual volume connections. If the connection selected as the representative EPTDS is not available for sampling, the PWS must sample an alternate highest volume representative connection (40 CFR 141.40(a)(3) Table 1, footnote c). Water provided by multiple wholesalers would be considered different sources, and PWSs would need to identify a representative connection for each, unless there is a common entry point downstream of the multiple connections.

Q: In the instance where a PWS has more than one treatment process and blends the water prior to distribution to customers, is there any special sampling one needs to follow?

A: If the PWS has a single, common entry point to the distribution system downstream of multiple treatment processes, that single entry point should be used for UCMR entry-point monitoring.

The following are the sampling location requirements for UCMR 4:

- UCMR HAA monitoring: Collect UCMR 4 HAA samples at the Disinfectants and Disinfection Byproduct Rules (D/DBPRs) locations where HAA5 is sampled for compliance monitoring.
- All other UCMR 4 contaminants, including cyanotoxins: samples are taken at the entry point(s) to the distribution system.
- Indicator monitoring for total organic carbon (TOC) and bromide: if the PWS is a:
 - SW or GWUDI system subject to the D/DBPRs for TOC monitoring, take indicator samples at your TOC source water sampling sites per 40 CFR 141.132.
 - SW or GWUDI system that is not subject to the D/DBPRs for TOC monitoring, take your indicator samples at your Long Term 2 Enhanced Surface Water Treatment Rule (LT2) source water sampling sites outlined in 40 CFR 141.703.
 - o GW system, take your indicator samples at the influents entering the treatment train representing untreated water.

Q: Are purchasers subject to UCMR 4? For example, some states have asked why a surface water purchaser is scheduled to sample for cyanotoxins. The water system only buys water from the wholesaler and does not have its own supply. Why are we testing when we buy our water from a wholesaler? One of our test sites is the same as our wholesaler.

A: Yes, purchasers (or "consecutive systems") are subject to UCMR 4 requirements (40 CFR 141.40(a)(1) & (2)). Monitoring by consecutive systems provides important information that will support regulatory determinations. Based on the experience of previous UCMRs, the agency believes that it is more appropriate to measure at each consecutive system to more accurately assess exposure, rather than relying on the results of monitoring by the wholesaler to represent all systems. This approach helps ensure that the monitoring results reflect any potential water quality changes between the wholesaler and each consecutive system.

PWSs with consecutive connections (locations with 100% purchased water) are not required to measure TOC and bromide (indicators for HAAs) in source water samples, but are required to collect entry point and distribution samples (40 CFR 141.40(a)(3) Table 1, footnote e). This includes entry-point monitoring for cyanotoxins.

For those limited circumstances where the wholesaler and the consecutive connection share a common entry point, and both water systems are subject to UCMR 4 monitoring, the two water systems can share a common set of analytical results if they can coordinate with each other and with the laboratory, to have those results posted to Safe Drinking Water Accession and Review System (SDWARS) on behalf of both PWSs.

Q: For seasonally operated SW systems, what happens if the systems are unable to complete the full round of eight EP samples for the cyanotoxins? For example, the system shut down for the season.

A: If a water system is operational for at least four months during the defined 9-month cyanotoxin sampling window (March-November), they should schedule their eight sample events within the operational period. If a water system is operational for fewer than four months during the cyanotoxin

sampling window, they should schedule their sample events within the operational period, recognizing that they will have fewer than eight sample events. Per UCMR 4, a system must not reschedule monitoring specifically to avoid sample collection during a suspected vulnerable period (40 CFR 141.35(c)(5)(i)).

Q: We are a PWS with one EPTDS for a SW source and 29 for GW sources. Treated SW blends with GW at various GW EPTDSs. For UCMR 3 - we had one SW EPTDS site and one SW DSMRT site and the rest were GW sites. Thus, the majority of sites were monitored using the GW frequency. This was based on the state's determination.

A: In general, a system with an EPTDS that relies on mixed/blended sources (and that includes SW or GWUDI as one of those sources) follows the monitoring frequency for SW/GWUDI systems.

The distribution system sampling locations have changed from UCMR 3 to UCMR 4. SW systems subject to D/DBPRs must monitor for UCMR 4 HAAs at **all** their distribution locations where HAA5 is sampled for compliance monitoring. Indicator monitoring for TOC and Br takes place at your D/DBPR TOC or LT2 locations. For the other UCMR 4 contaminants (including cyanotoxins), samples are taken at the entry points to the distribution system.

Q: Just to be sure, will the UCMR 4 monitoring requirements apply to a wholesale system that has zero or very few (say, less than 500) retail customers? If that's the case, how would a 100% purchasing system monitor for treatment plant influent?

A: UCMR requirements do not apply to wholesalers that do not have retail customers. If the wholesaler serves more than 10,000 retail customers, it is subject to UCMR 4 requirements. If the wholesaler serves 10,000 or fewer retail customers and is selected for representative small-system monitoring, it will be notified.

Water systems that purchase 100% of their water are not required to conduct source water monitoring for TOC and bromide.

Q: We are a large ground water system but may become a GWUDI water system in 2019. How should our sampling be conducted with the 10 cyanotoxins and 20 additional chemicals once we change over to GWUDI?

A: Please contact <u>UCMR Sampling Coordinator@epa.gov</u> to add your GWUDI sampling location(s) to your inventory. The Sampling Coordinator will help you make the appropriate changes to your inventory and schedule, if needed.

Q: On page 92685 of the Federal Register it states that if you anticipate a closed sampling location you must mail or email a letter to EPA, prior to the scheduled sampling date. How quick will the approval be? With short-term access issues (e.g., construction), can you change the EP sampling site for one quarter?

A: Large systems must enter inventory information into the Safe Drinking Water Accession and Review System (SDWARS) by December 31, 2017, and may independently modify their schedule prior to that date. Changes to a large system's inventory or schedule after the deadline must be requested (with reason), and approved by EPA's Sampling Coordinator at UCMR Sampling Coordinator@epa.gov. In this instance, since the sampling location is not permanently offline you do not need to contact the UCMR Sampling Coordinator. Simply enter a comment in SDWARS for that location explaining that it was closed during that sampling event. If small systems need to make changes to any of the information in

SDWARS please contact EPA's implementation contractor Great Lakes Environmental Center at UCMR4@glec.com.

Q: Do we upload inventory and then EPA will assign the tentative schedule that we may modify?

A: For small and large systems, EPA will initially draft the monitoring schedules. States that choose to partner with EPA can then review and modify the schedule. After state review, the large systems can review and independently modify their schedules in SDWARS4, until December 31, 2017. Any proposed schedule changes after that date must be sent to UCMR Sampling Coordinator@epa.gov for approval. Any small system schedule changes should be sent to EPA's implementation contractor at UCMR4@glec.com.

III. Cost

Q: What is the cost of this monitoring? This is for budget purposes.

A: The document "Information Collection Request for the Final Unregulated Contaminant Monitoring Rule (UCMR 4)" outlines the estimated costs for UCMR 4 monitoring and it is available on the docket at https://www.regulations.gov, Docket ID No. EPA-HQ-OW-2015-0218. PWSs are encouraged to consult with one or more laboratories for up-to-date analytical costs.

IV. Cyanotoxins

Q: If a "groundwater" system purchases a modest amount of treated surface water (say less than 10% of our total supply) is it required to perform cyanotoxin monitoring (based on the surface water component of its total supply)? Is there a minimum percent of surface water that triggers such monitoring?

A: All large systems (and selected small systems) with a SW or GWUDI source are required to monitor for cyanotoxins. The rule does not define a *de minimus* SW contribution.

Q: Do GW systems have to monitor for cyanotoxins?

A: No. GW systems are not required to sample for cyanotoxins.

Q: If we have a GW source and we purchase water from a SW system, are we only required to collect cyanotoxins at the entry points from the purchased SW source locations?

A: Under UCMR 4, PWSs are only required to monitor for cyanotoxins at entry points associated with SW and GWUDI sources.

Q: If one of the eight cyanotoxin sampling events (SEs) is invalid due to an error, can the PWS do a makeup SE at the end of the 4-month period?

A: PWSs may do a makeup SE at the end of the 4-month monitoring period for cyanotoxins, but UCMR 4 does not require that they do so.

Q: Data elements #27-30 require PWSs to make observations for algae growth at the sources. Does it mean PWSs need to make observations and report for each source?

A: For data elements #27-30, PWSs should answer based on the source associated with the particular entry point to the distribution system (EPTDS) where cyanotoxin monitoring is being conducted. Where multiple sources supply water for a single EPTDS, the PWS should answer based on the source that supplies the majority of water to that EPTDS.

Q: How are consecutive systems to answer SDWARS data elements #27 to 30?

A: If consecutive systems cannot get the information from their wholesaler, they may enter "NA," "NO," or "I Don't Know" depending on the data element.

Q: Do PWSs with very remote sources (e.g., taking a hike or flying a drone to the source type remote) need to view their source biweekly? In some cases, they very rarely if ever view their sources so the logistics of even attempting this are unknown.

A: Systems with remote sources should answer data elements #27-30 to the best of their ability. Each data element has a "NO," "I Don't Know," or "NA" option.

V. HAA Monitoring

Q: Regarding the HAA monitoring component, is it appropriate for a GW PWS on D/DBPR reduced monitoring to enter its scheduled annual sample date as one of the two required UCMR 4 samples? A: Yes, please update your schedule in SDWARS to collect your UCMR HAA samples and D/DBPR compliance samples at the same time. Systems on a reduced D/DBPR frequency must comply with the UCMR 4 frequency requirements. Systems should input inventory into SDWARS based on current D/DBPR monitoring requirements and status (routine or reduced). Those wishing to coordinate their D/DBPR compliance monitoring and UCMR monitoring should keep in mind that the samples must be analyzed using EPA Method 552.3 or 557.

Q: Why is the HAA5 group included when it is already regulated?

A: EPA has concluded that monitoring for the three HAA groups (HAA5, HAA6Br and HAA9) will provide important information on the relative occurrence between regulated and unregulated HAAs as well as brominated versus chlorinated HAAs (81 FR 92671). EPA is using different statutory authority (SDWA 1445(a)(1)(A)) as the basis for including HAA5 monitoring along with the monitoring for the other contaminants being monitored under the UCMR authority (SDWA 1445(a)(2)).

Q: Is it permissible for systems to sample the HAA groups in one calendar year, and the rest of List 1 analytes in a different year?

A: Yes. It is possible to schedule sampling for different contaminants and/or different sample points across different years, or at different times during a particular year.

Q: A large PWS has 12 D/DBPR distribution sites; do they have to sample all 12 at each UCMR 4 sampling event for HAAs? If a system has more D/DBPR sample locations than required by the rule, should the system sample all locations?

A: Yes, to both questions, however to reduce burden, UCMR 4 HAA samples and D/DBPR compliance samples can be collected at the same time. PWSs should input inventory into SDWARS based on current D/DBPR monitoring requirements and status (routine or reduced).

Q: My understanding was that the three subgroups for HAA are three separate samples?

A: PWS HAA results are reported for the three HAA groups (HAA5, HAA6Br and HAA9). However, the system would take only one sample at each D/DBPR distribution system location where HAA5 is sampled for compliance monitoring. The laboratory relies on a single sample to measure individual HAAs and then calculates the HAA5, HAA6Br, and HAA9 sums.

Q: I send my D/DBPR samples to a lab out of my state. Under what circumstances do I need to use a different lab for UCMR 4 HAAs and my D/DBPR compliance samples? What if the lab I send my D/DBPR HAA5 compliance samples analyzes them by EPA Method 552.2? Will it be acceptable to analyze UCMR 4 samples by this method to avoid duplicate sample collection for UCMR 4? Can a PWS use the UCMR 4 HAA data for D/DBPR compliance?

A: You may use a single lab to support D/DBPR compliance monitoring and UCMR HAA monitoring, even if it is out of state, as long as that lab is certified/accredited by your state for compliance monitoring and approved by EPA for UCMR 4. You can use sample results from a single monitoring event to support both UCMR 4 and D/DBPR as long as the lab is using one of methods approved for UCMR 4 (EPA Method 552.3 or 557). EPA Method 552.2 is not approved for UCMR 4.

Q: For GW systems, can we monitor for the UCMR 4 HAAs at our established Stage 2 HAA5 locations, and then for the remaining UCMR metals, etc., do we sample at the entry points? Do we need to collect the UCMR 4 HAA samples at the same time as the EPTDSs samples?

A: UCMR 4 HAA samples must be taken at D/DBPR distribution system locations where HAA5 is sampled for compliance monitoring, and TOC and bromide samples are collected at the source. Monitoring for the other contaminants occurs at each entry point to the distribution system (EPTDS) after treatment is applied. To reduce burden, UCMR 4 HAA and D/DBPR compliance samples may be collected at the same time (see prior Q&A on this topic). It is possible to have different schedules for the UCMR 4 HAAs and the other UCMR 4 contaminants.

Q: Our water system consists of a SW plant and two GW wells. We have five D/DBPR sites, one of which is the SW treatment plant entering the system. For inventory purposes, what should our inventory look like?

A: For assistance with specific inventory questions, please contact the UCMR Message Center (800) 949-1581 or <a href="https://www.ucman.gov/ucm

Q: I understand that we will need to sample from all sources for HAAs but if we have 50 wells and eight HAA points, will we have to sample from all 50 wells each time we sample for HAAs if we decide to split up the HAAs into two sets for monitoring (i.e., four samples in one month and four samples three months later)?

A: Since TOC and bromide monitoring must occur at each source water influent location representing untreated water, a GW system with 50 wells that are not combined before treatment would need to monitor each well, unless it makes arrangements for representative sampling. These samples should be taken at same time as HAA samples (or as close as is feasible). For cases such as this (involving a large number of GW wells), we recommend that you establish a ground water representative monitoring plan (GWRMP) to reduce your burden. Large GW systems with approved GWRMPs are only required to take TOC and Br samples representing the entry points in their plan. For more information about GWRMP, please refer to the webinar https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule-ucmr-4-meeting-presentations.

Q: If we are required by our state health department to sample more than the D/DBPR's set number of quarterly HAAs sites, do we sample and report only those required by EPA in SDWARS, or does the SDWARS allow for additional numbers of distribution sample sites and results for the HAAs? (For example, the D/DBPR sets our quarterly sites at 12 based on our population, but our state health department requires 21 quarterly sites for our water system). Does slide #48 of the presentation mandate the number of HAA distribution system samples that PWSs must collect for UCMR 4 purposes?

A: UCMR 4 specifies that HAA sampling must be conducted "at the D/DBPR sampling locations." If you have 21 D/DBPR sampling locations where HAA5 is monitored for compliance, you should sample those 21 locations for UCMR 4 HAAs. The table on slide #48 shows the *typical* number of D/DBPR distribution system monitoring locations based on system population, but we recognize that states can require more extensive sampling. SDWARS has no limitation on the number of distribution sample sites for a water system.

Q: Will the labs be reporting the HAA summations? HAA5, HAA6Br, HAA9?

A: UCMR 4 approved laboratories will be submitting the individual analytical results for each of the nine HAAs along with the associated quality control (QC) data. SDWARS will calculate the HAA5, HAA6Br, and HAA9 sums. Only the HAA5, HAA6Br and HAA9 sums will be available to the public, since the reporting of the individual HAAs is only for QC review purposes.

Q: If HAA5 and TTHM samples are paired, and if the PWS wants to use HAA sampling to meet D/DBPR and UCMR 4 requirements, how will that work?

A: Systems monitoring under the D/DBPRs (whether conducting paired HAA5/TTHM sampling or not), may also use their D/DBPR HAA sample as their UCMR 4 sample. The sample must be analyzed by a lab that is certified/accredited by your state for compliance monitoring and approved by EPA for UCMR 4, and the lab must use one of methods approved for UCMR 4 (EPA Method 552.3 or 557).

Q: When you enter your HAA5 sampling sites, where do you get the Sample Point ID when you don't have one? Is it required before you can proceed with the input?

A: Water systems should consult their state about the names/IDs of their sample points. Yes, Sample Point IDs must be entered into SDWARS as part of the inventory process. The Sample Point ID must be a unique text code up to 20 characters including numbers and letters, no special characters (e.g., WELL123).

Q: The minimum reporting levels (MRLs) for the HAAs seem quite low?

A: The MRLs listed in the meeting presentation are the same as the MRLs listed in the final UCMR 4. See 40 CFR 141.40(a)(5)(v) Table 4. The MRLs were established taking into account the performance of multiple laboratories and EPA is confident that they can be met.

VI. Indicator Monitoring

Q: If our PWS has no GWRMP and multiple well sources are activated/inactivated on a frequent schedule, such as alternating daily, should each source be sampled for indicators even if the samples might be taken a day or more apart? If not, then how should the water system choose which source should be running when they sample the influent to the treatment plant or entry point?

A: Indicator samples should be taken at the same time as HAA samples (or as close as is feasible). The system only needs to take indicator samples from active wells at time of collection. If the wells are frequently activated/inactivated (i.e., daily), the system must sample for each well active during the scheduled sample month. Please include a comment in SDWARS for the long-term, inactive wells.

Q: For TOC and Br monitoring, do we sample from the sources that contribute to that HAA site or do we sample from all the sources in that system? We have two separate source waters. Can we take a sample for the TOC & Br at a combined tap or do we need to sample each source separately? If there

is no treatment before the water gets to the plant, can we sample at the plant pre-treatment or must we sample at the intake?

A: If a SW or GWUDI system is subject to TOC monitoring under the D/DBPRs, collect UCMR 4 TOC and bromide samples at your TOC source water sampling sites per 40 CFR 141.132. If a SW or GWUDI system is not subject to the D/DBPRs for TOC monitoring, collect your UCMR 4 TOC and bromide samples at your LT2 source water sampling sites outlined in 40 CFR 141.703. For a GW system that does not have a D/DBPR or LT2 TOC sample point, collect your UCMR 4 TOC and bromide samples at the influents entering your treatment train (i.e., a location prior to any treatment). If any of the sources are combined/blended before the application of any treatment, you can sample from this combined tap or common header. If the GW system has an approved GWRMP, the system need only take indicator samples from sources representing those locations listed in the GWRMP.

Q: We have an interconnection with a large SW system but all our sources are GW. Are we still required to measure TOC and bromide for all the wells?

A: SW purchased systems, where 100% of your SW is purchased, will not have TOC and Br locations.

Q: Are SW sources currently subject to D/DBPR monitoring required to monitor for both TOC and bromide, or just TOC? Are those that use the alternative compliance method also required to include SUVA monitoring in reporting for UCMR 4?

A: Under UCMR 4, systems are required to monitor for both TOC and bromide. Specific ultraviolet absorbance (SUVA) monitoring is not required under UCMR 4.

Q: Are large GW systems that only pump and chlorinate required to take TOC and Br samples? A: Yes, any systems subject to the D/DBPR are subject to UCMR 4 HAA, TOC and Br monitoring.

Q: If we collect the UCMR 4 HAA and indicator samples outside of our D/DBPR compliance period (i.e., we don't coordinate our UCMR 4 HAA5 monitoring with our D/DBPR compliance monitoring), do the results of the UCMR 4 HAA5 monitoring factor into the calculation of our HAA5 Locational Running Annual Average (LRAA), potentially contributing to a violation?

A: From a federal perspective, and with respect to D/DBPR, the UCMR 4 HAA5 samples could be considered "operational samples" in the situation you describe since they are not part of the D/DBPR approved monitoring plan and schedule. The results would not factor into the calculation on your LRAA. Recognizing, however, that states have primacy for D/DBPR, states may require a different approach.

Q: How will PWS Labs submit TOC or Bromide data only? Do they need a separate Key?

A: Laboratories (including PWS laboratories) that wish to exclusively analyze TOC and/or bromide samples must email UCMR Sampling Coordinator@epa.gov by December 1, 2017 to register for the Lab Approval Program. Next, the laboratory must complete registration and submit documentation that shows they are authorized by their primacy state to analyze TOC and/or bromide compliance monitoring samples under the D/DBPRs by December 15, 2017. After the lab has received their official notification that they are authorized to analyze UCMR 4 TOC and/or Br samples they will receive a customer retrieval key (CRK) by mail. This will allow the lab to add itself as a client and report TOC and/or Br data into the Safe Drinking Water Accession and Review System (SDWARS 4).

Q: We purchase 100% with two different entry point locations from the supplier. Am I required to test for TOC and bromide at those locations? Or can I use a Stage 2 location with an entry location?

A: Entry points associated with 100% purchased water (consecutive connections) do not need to be sampled for TOC and bromide.

Q: If TOC in source water must be monitored for GW systems, and there are multiple GW sources that go to a storage tank - can the TOC sample be collected at the point after all the sources have combined at that storage tank - prior to chlorination point?

A: If multiple sources are combined before the application of any treatment, you can sample for TOC (and Br) from this combined source.

Q: Why do PWSs have to test for TOC and Br at each SW source for UCMR 4? We already collect the TOC data for the D/DBPRs.

A: Collection of TOC and bromide through the UCMR 4 process will create a more robust and reliable dataset for future regulatory decisions. Note as well that TOC concentrations can vary widely over time; concentrations measured during D/DBPR monitoring may be very different from those during the UCMR 4 HAA monitoring. As discussed in prior Q&A, UCMR 4 and D/DBPR monitoring for HAAs and indicators can be coordinated to reduce expenses.

Q: Can a GW system with 16 wells that supply one treatment facility demonstrate that a single point on the facility (prior to any chemical treatment or aeration) is representative of the source water influent?

A: For GW systems that combine/blend water from multiple wells prior to any treatment, a single sample for UCMR 4 TOC and Br source water monitoring, at a location prior to any treatment, is appropriate.

VII. Representative Monitoring

Q: Did you say that GWRMPs may or may not be acceptable at a STATE level?

A: We are addressing the concept of GWRMPs specifically in the context of UCMR 4 monitoring. From a UCMR perspective, any GWRMP approved by EPA or a partnering state is acceptable. The following states, tribes, and territories have partnered with EPA to receive and review GWRMP applications: Alabama, American Samoa, Arizona, Arkansas, Delaware, Florida, Georgia, Guam, Indiana, Louisiana, Marianas, Maryland, Michigan, Minnesota, Mississippi, Missouri, Navajo Nation, Nebraska, Nevada, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, and West Virginia. You may contact your state officials for details. GWRMPs from PWSs in the remaining states, tribes and territories not listed will be reviewed by EPA.

Q: If a GWRMP is approved, should the PWS remove EPs that the GWRMP covers and leave only the representative EP in inventory?

A: Yes. The UCMR inventory in SDWARS should include only those representative entry points (approved in the GWRMP), at which monitoring will take place.

Q: For a GW that has eight wells, and there is a common header that I can sample for TOC/bromide, do I still need an approved GWRMP that lists all the wells?

A: A GWRMP is not needed in this circumstance. If water from multiple wells is combined and the water can be sampled in the common header prior to any treatment, a single sample for TOC and bromide is appropriate. UCMR 4 HAA distribution system monitoring locations are determined based on D/DBPR compliance monitoring requirements. Keep in mind that a GW system with multiple wells, may still wish to submit a GWRMP. If approved, it would allow sampling for all other UCMR 4 contaminants at representative locations, and reduce expenses.

Q: Are TOC/bromide samples required to be collected at all entry points or just those listed in the GWRMP? Can a GWRMP be used to reduce sampling required at intakes for a GW system (i.e., TOC/Br) while not impacting the sampling of the EPTDS? That is, reducing intakes to points that only truly impact the Stage 2 DBP HAA sites, but not reducing EPTDS sampling?

A: If a system has an approved GWRMP, it will only need to take indicator samples at the untreated sources that feed the representative entry points designated in the GWRMP.

Q: Current instructions tell PWSs to submit the plan to UCMR Sampling Coordinator. However, some states partnered to review these. In those instances, will the UCMR Coordinator respond telling them to submit to state instead? Or how will PWS know if they should send to state vs. EPA? NJ wants to review the plans for their state (whether new or previous approval, we still want to see the plan).

A: Water systems must email UCMR Sampling Coordinator@epa.gov to submit their GWRMP. If a state agreed to review the GWRMP, EPA will forward the application to the state and send the water system a copy of the transmittal letter. The state will then notify the water system and EPA of the approved final plan so the water system knows their inventory to load into SDWARS, and EPA will know the inventory to expect to see in SDWARS.

Q: Is there a template/form that we can use to apply for GWRMPS?

A: You may email UCMR Sampling Coordinator@epa.gov for an example.

Q: Regarding GWRMP's - will a different screened interval in the same aquifer be a factor with multiple wells in the same aquifer?

A: GWRMPs were created to allow PWSs to designate representative monitoring wells in cases where multiple wells are tapping into the same source. If water characteristics (chemistry, pollution potential, etc.) differ from one interval to another, one cannot be designated representative of another. However, a PWS may be permitted to designate a representative well for each interval. Of course, all determinations are site-specific and must take into account other practical considerations.

Q: If we uploaded sites for representative monitoring from SDWARS3 do we need to submit our reduced monitoring plan to the EPA representative?

A: Representative sampling plans approved under prior UCMRs will be recognized as valid for UCMR 4. Systems must submit a copy of previously-approved plans to <u>UCMR Sampling Coordinator@epa.gov</u> with documentation of the approval from their state or EPA.

VIII. Methods

Q: What is the holding time for the analysis of cyanotoxins? Mainly asking to see if a duplicate sample would be useful.

A: The cyanotoxin sample holding times for: EPA Method 546 is 14 days; EPA Method 545 is 28 days; and, EPA Method 544 is 28 days for initial sample extraction processing with analysis of the sample extract within 28 days. EPA recommends taking duplicate samples.

Q: EPA is recommending collecting duplicate samples for 544 because of the difficulty of scheduling resampling, but does EPA recognize that the thioacetamide used as a preservative in 544 is considered a hazardous waste and cannot be discharged to the sewers, so every 544 bottle must be disposed of

as hazardous waste? We urge EPA to rethink this, or to quickly evaluate alternative biocides (e.g., omadine).

A: The anti-microbial preservative used in EPA Method 544 is 2-chloroacetamide and not thioacetamide. While thioacetamide is a Resource Conservation and Recovery Act (RCRA) coded hazardous waste, 2-chloroacteamide is not. If there is concern regarding the disposal of samples that contain the required preservatives used in the approved methods, then the laboratory should contact their local wastewater treatment plant to discuss discharge approval. Sample duplicates are *recommended* by EPA. Laboratory fortified sample matrixes (LFSMs) and duplicates (LFSMDs) are *required* as part of the method QC.

Q: Should the water system hold on to the duplicate sample set, or send both to the lab?

A: EPA encourages water systems to collect duplicate samples and send the duplicate with the main field sample to the laboratory at the same time.

Q: Will laboratories know to ONLY analyze the Method 544 sample if the result of Method 546 analysis is greater than or equal to 0.3?

A: Laboratories should be aware of this requirement. However, EPA recommends that water systems ensure that this phased sample approach is addressed in their contract with the laboratory.

Q: Because EPA requires MS/MSD on each method but we won't know till we have 546 results whether 544 will be analyzed, it seems like every sample will need to have at least three bottles sent to the utility (four if you also include dups) so there is enough for MS/MSD when there are actual samples collected. Could EPA consider NOT requiring MS/MSD for 544 to avoid the proliferation of hazardous waste?

A: None of the chemical preservatives used in the UCMR 4 methods are considered RCRA hazardous waste, but laboratories should follow their established procedures for waste disposal and should contact their local wastewater treatment plant if they have disposal concerns. LFSM and LFSMD samples are required QC as stated in EPA Method 544. PWSs should collect four 500 mL samples which provides enough volume for the primary sample, duplicate, LFSM and LFSMD.

Q: Can two different labs perform the cyanotoxin Methods 546 and 544? One lab will do 546 and one lab will do 544. How do you recommend the PWS coordinate this?

A: Yes, two different approved labs can perform EPA Method 546 and 544 for a particular sample. If the results from Method 546 indicate that Method 544 needs to be analyzed, clear communication and coordination among the water system and the laboratories running the analyses needs to be established.

Q: If re-sampling is required for Method 544, do water systems need to re-enter the data elements #27 - 30? Should method 546 be resampled with Method 544?

A: The responses to the data elements need to coincide with the sample or resample that produced the valid results. Generally speaking, UCMR resamples must be collected within 30 days of the lab notifying the PWS of the QC failure. Based on the biweekly frequency for cyanotoxin sampling, this represents a different situation. If the analysis for a particular cyanotoxin sampling event does not produce a valid result for both 546 and 544, a replacement sample should be collected if practical (i.e., if the resampling can take place prior to the next scheduled sampling event). In those cases, where it proves impractical to resample, PWSs should enter a comment in SDWARS outlining the circumstances of the missing result. If the analysis for the first sampling event (SE1) does not produce a valid result, SE1 should be repeated and the schedule for SE1-SE8 should be shifted to accommodate. Please contact UCMR Sampling Coordinator@epa.gov for schedule changes. EPA recommends that water systems

take duplicate samples (as done by EPA for small systems) to reduce the probability for resampling and QC errors.

Q: Method 546 samples are stored in glass and then frozen upon receipt. Shouldn't laboratories advise water systems not to overfill the containers to avoid breakage?

A: Yes, samplers should be advised to adequately fill the bottles as indicated by their laboratory, but do not overfill the bottles so that preservatives are lost. Please follow the instructions from your laboratory, because every laboratory could have a different approach.

Q: How will the laboratory plan for and post 544 LFSM/D data if they do not know whether sampling sites that collected extra volume will require analysis? In other words, can a FS/LFSM/D be analyzed and posted into SDWARS simply to supply matrix spike data even when the 546 was non-detect?

A: LFSM/D data can only be loaded into SDWARS if the corresponding field sample has been loaded into the database. If there is no field sample positive to report for Method 544, the laboratory should not attempt to report Method 544 LFMS/D data. We anticipate that labs will need to collect enough volume for potential 544 LFSM/LFSMD analyses every time.

Q: Our analytical lab is having difficulty achieving the low MRLs required for UCMR 4 for bromodichloracetic acid, chlorodibromoacetic acid, and tribromoacetic acid. Are there contacts for someone who we could provide guidance on how to achieve the MRLs for EPA 552.3?

A: Please contact the Lab Approval Program at UCMR Lab Approval@epa.gov.

Q: You mention the HAA method already includes analysis of all nine HAAs and should not be an additional cost. While that is correct, I doubt labs are calibrating and verifying the non-regulated HAAs. So, there may be additional costs. That assumption is not necessarily true.

A: Yes, you are correct. Cost could vary, but we anticipate that the impact of reporting for the additional HAAs will be modest.

Q: Why can't laboratories use EPA Method 552.2 to monitor for the nine HAAs?

A: EPA Method 552.2 uses only Methyl Tertiary Butyl Ether (MTBE) as the methylation solvent and incorporates copper sulfate. That method is not appropriate for the analysis of the unregulated brominated HAAs. In the UCMR 4 approved EPA Method 552.3, an alternate higher boiling methylation solvent (tertiary-amyl methyl ether (TAME)), is used to improve methylation efficiencies and copper sulfate has been removed because it can degrade some of the brominated HAAs (bromodichloroacetic acid, chlorodibromoacetic acid, and tribromoacetic acid).

Q: Is there a mechanism for running duplicates or rerunning analyses for TOC where the QA/QC data is out of range? Are the QA/QC requirements for TOC available? Must the HAA samples also be recollected in the distribution system?

A: QC requirements for TOC are outlined in the TOC methods. Samples that fail QC requirements must be reanalyzed (this involves a recollection if additional sample volume is needed). A TOC QC failure does not trigger a recollection of the HAAs if the HAA data pass QC.

Q: EPA Method 541 stipulates an initial volume of 50 mL but the Laboratory Approval Requirements and Information Document, section 4.4 states an initial volume of 40 mL. Is it acceptable to use either?

A: No, you should use 50 mL as required by the methods. EPA will correct this in the next version of the laboratory document.

Q: What is the calibration acceptance criteria for Method 200.8? EPA 200.8 is not listed in section 6.3.6 of the Laboratory Approval Requirements and Information Document requiring responses be entered into the curve for evaluation and yet 200.8 acceptance criteria is listed in Table 4. Methods.

A: Method 200.8 was inadvertently left out of the list of methods that are required to recalculate the calibration standards for percent recovery in section 6.3.6 of the UCMR 4 Laboratory Approval Requirements and Information Document. For UCMR 4 Method 200.8, labs are required to recalculate the calibration standards as samples and meet the criteria listed in Table 4. However, laboratories are not required to report these values in the UCMR 4 Method 200.8 application. EPA will correct this in the next version of the laboratory document.

Q: For pH and chlorine checks, if one sample for one method is out of sample receipt acceptance criteria, do all the other samples become invalid for the other methods as well? Meaning, would the client have to resample the entire suite of requested analyses or would they only have to sample the one sample for that specific method that did not pass criteria?

A: Each method has a variety of sample receipt checks with different values. If one method or one bottle fails sample receipt criteria, that does not mean all the bottles fail sample receipt acceptance criteria.

Q: If a sample fails the pH or chlorine screening, can additional preservative be added to any of the other methods besides 200.8?

A: Only the prescribed UCMR 4 method preservatives may be used. No additional preservatives may be added to water samples unless otherwise directed in the methods.

Q: Will laboratories be required to re-analyze the samples if the method blank is above detection? Or will a new sample be required?

A: If any aspect of the method QC fails, the data are invalid. Labs should reanalyze the sample if within holding time, or request a resample.

Q: Does the requirement to measure temperature of one of each bottle types in a cooler remain in place? Will that be a requirement if wet ice is used?

A: Yes, the temperature of at least one bottle for each method will need to be taken upon receipt, regardless of whether or not wet ice is used.

Q: Will 200.8 samples require collection of field blanks?

A: No, this was required under UCMR 3, but is not required under UCMR 4.

Q: Wouldn't it have been more cost effective to include the two metals with the metals covered in UCMR 3 in Method 200.8?

A: Ideally, and applying hindsight, yes. EPA made decisions about the UCMR 3 contaminants based on the information available at the time, and mindful that SDWA limits EPA to including no more than 30 contaminants per cycle. Since then, new information became available. For example, following the publication of UCMR 3, manganese was nominated to be included on the fourth Candidate Contaminant List (CCL 4). Consequently, it became a higher priority for UCMR 4 contaminant selection.

IX. Lab Approval Process

Q: The general application to serve as a UCMR 4 laboratory was due on 4/19/17. Can you please confirm when the method-specific applications are due?

A: Each laboratory must pass one proficiency test (PT) study for each method for which they are seeking approval for UCMR 4 (with the exception of TOC and bromide methods). When the laboratory's application for a specific method is reviewed and determined to meet the UCMR 4 method criteria, that laboratory can participate in EPA's UCMR 4 PT study for that method. Participation in a PT study is method-specific. To participate in a PT study, final method applications are due to EPA two weeks prior to the shipping date for the PT study. PT study dates are announced to the laboratories that have applied for UCMR approval. The remaining proficiency testing schedule includes PT5, which is tentatively scheduled to ship on November 6, 2017 (applications would be due October 23, 2017).

EPA encourages laboratories to get applications in early so that any issues can be resolved in time to participate in a particular PT. Waiting to participate in the final PT will not allow the laboratory to address a failure for a particular method.

Q: If a PWS includes a state certified lab for TOC, can they analyze for TOC without going through the UCMR 4 lab approval process?

A: Laboratories (including PWS laboratories) that wish to exclusively analyze TOC and/or bromide samples, do not need to undergo all of the steps for UCMR 4 laboratory approval. Rather, they must email <a href="https://www.ucman.com/ucm

Q: I understood that a laboratory had to be approved for all analytical methods or it could not participate. Is this correct?

A: Only labs that are approved for all methods will qualify for small-system support contract awards. Laboratories that wish to exclusively support large systems need only be approved by EPA for the methods they wish to use.

Q: Is there a current list of UCMR 4 approved laboratories? Are the UCMR 3 approved laboratories automatically approved for UCMR 4 or do they need to re-register?

A: UCMR 3 laboratory approval has no relationship to UCMR 4. Those laboratories wishing to support UCMR 4 must go through the UCMR 4 approval process for each method they would like to run. An initial list of UCMR 4 labs has been posted to https://www.epa.gov/dwucmr and will be periodically updated.

Q: The UCMR 4 laboratory approval application asks for the certificate from the home state, however do you want the scope of certification to show the methods?

A: The scope of certification should indicate the method(s). Please document drinking water certification by a state or regional Certification Authority as indicated in the applications. Certification in a minimum of one drinking water compliance monitoring method is required.

Q: If we have an incomplete method application package and mention our plan to complete all the requirements in the package is it acceptable?

A: The application package must be complete and acceptable before the laboratory can participate in a PT. Laboratories must pass a PT study before becoming approved.

Q: If a lab is certified by a state for HAA5s using Method 523.3, would it also not be approved to use Method 552.3 as a UCMR 4 lab?

A: No. EPA approval to support UCMR 4 monitoring is required irrespective of the scope of state certification of a laboratory.

UCMR monitoring includes unregulated contaminants that do not fall under the scope of traditional SDWA certification by states for compliance monitoring. Since these contaminants are not included in a state certification program, EPA evaluates each laboratory that wishes to analyze samples for UCMR to ensure that laboratories can demonstrate they can meet the MRLs, method QC requirements and data-reporting criteria. EPA also requires laboratories to pass a proficiency test study for each method for which the laboratory wishes to be approved.

In addition, laboratory approval to perform UCMR 4 analyses will only apply during UCMR 4 monitoring. A laboratory's approval for UCMR 4 analyses has no impact on their certification to perform compliance monitoring under other Nation Primary Drinking Water Regulations (NPDWRs).

Q: What is needed from PWS laboratories who are already certified to run manganese?

A: PWS laboratories must submit a completed application to <u>UCMR_Lab_Approval@epa.gov</u>, and pass a PT for one of the available methods to be approved by EPA to support UCMR 4 monitoring.

Q: When will the database training session take place for the laboratories?

A: This training will occur on November 6, 2017 for PWSs, and November 8, 2017 for labs. For any questions, the Laboratory Coordinator can be reached at <a href="https://www.ucmn.com/ucmn.co

Q: Can you fail a couple PTs as long as you eventually pass one?

A: Yes. Laboratories that do not pass the PT study for a given method can participate in the next PT study for that method, if one is scheduled.

Q: Since section 6.4.3 of the Laboratory Approval Requirements and Information Document allows for "rare" acceptance of failing high bias continuing calibration checks (CCCs) when reporting non-detects for field sample results, does the laboratory need to get specific permission prior to reporting this data?

A: Yes, laboratories must contact the Laboratory Approval Coordinator at UCMR Lab Approval@epa.gov in that instance.

Q: In Table 15 of the Laboratory Approval Requirements and Information Document, data element #21, what is QHS?

A: QHS stands for quality HAA sample; a sample collected and submitted for QC purposes.

Q: I was under the impression that no data may be accepted when a laboratory reagent blank (LRB) fails criteria and yet in section 6.7.1 of the Laboratory Approval Requirements and Information

Document for Method 546, "...any samples that yielded a positive result in the Analysis Batch are invalid." implying that non-detect (ND) samples would be valid.

A: QC failures generally invalidate field sample results. Laboratories should discuss unique circumstances with the <u>Laboratory Approval Coordinator</u>.

Q: Is the laboratory expected to track previous SE results in order to meet the requirements in section 6.10.4 of the Laboratory Approval Requirements and Information Document, suggesting adjustment of the fortification concentration of LFSM/Ds based on expected field sample (FS) results?

A: Yes, laboratories should track field sample results to determine which samples should be fortified as LFSM/LFSMD samples.

Q: Section 6.13 of the Laboratory Approval Requirements and Information Document states to annotate results as a dilution. How will we be doing this?

A: This should be documented by the laboratory in their internal records, and made available during UCMR 4 lab audits.

Q: What is the difference between the concentration fortified (CF) in data element #21 and the additional value in data element #24 of Table 15 of the Laboratory Approval Requirements and Information Document?

A: They are the same values and both were included to allow different options and flexibility in establishing the new QC requirement within SDWARS. Only one option will be required and this will be identified in the text flat file specifications document.

Q: Is the lab ID for the applications the EPA ID for the lab, for SDWARS reporting purposes?

A: Yes. Certified laboratories (labs that have been certified by a state to support drinking water compliance monitoring), have an assigned Lab ID by EPA. Laboratories must use the EPA Lab ID for UCMR reporting. EPA confirms the EPA Lab ID upon receipt of the Lab Approval Program registration.

X. SDWARS and Reporting Requirements

Q: If a laboratory applied for various method approvals and are submitting PT results should they already have received a customer retrieval key (CRK) to register as a lab in SDWARS to report data? A: The laboratory will receive a CRK after it has received official notification from EPA that they are approved for a UCMR 4 method (or authorized to analyze TOC and/or Br). EPA will send a CRK by mail. This will allow the lab to add clients and report data into SDWARS.

Q: What is the structure of SDWARS in respect to PWS and laboratories? Since the laboratory will not be entering Data Elements #27-30 into SDWARS, how can we be certain this information gets recorded by the PWS, near the time of sampling, before it is too late to make such observations? A: On our website https://www.epa.gov/dwucmr/reporting-requirements-fourth-unregulated-contaminant-monitoring-rule-ucmr-4 there is a SDWARS instruction document that will walk you through the available functionality for PWSs and laboratories. There will be additional webinars on November 6th and 8th, 2017 for both PWSs and laboratories, respectively, to review SDWARS functionality. The small systems will answer data elements #10-12 and #27-30 on their sample tracking form (STF) at time of collection. An EPA representative will then input the information into SDWARS. Large PWSs should make note of their responses to data elements #27-30 at time of collection. We are currently examining the pros and cons of allowing large systems to input these data elements into SDWARS at time of collection, versus having the PWS enter the information into SDWARS after the

results are posted by the laboratory. This will be addressed as part of the aforementioned webinars and in guidance on our webpage.

Q: If you have a CDX log-in for another monitoring program, do you need one specific to UCMR 4?

A: Yes, you need a designated CRK to login for UCMR 4. You will use your CDX log-in to select the UCMR 4 monitoring program.

Q: As a small water system serving a population of 450 that didn't receive any notification of selection, should I still have received a CRK (customer retrieval key) for CDX?

A: No. If you are not notified by EPA or your state that you were selected, and do not receive a CRK letter, you will not be participating in UCMR 4. A subset of small systems was randomly selected to participate in UCMR.

Q: Can the technical contact be the same as the official contact for SDWARS?

A: No. All PWSs must have an "official" contact defined as the administrative representative, and a different "technical" contact as an alternate. You can specify additional contacts as "other." You may edit or delete these contacts at any time as personnel changes, but you must have an official and technical contact in SDWARS at all times or you will not be able to proceed further. EPA suggests systems nominate additional contacts in case contacts leave the PWS.

Q: When will the PWS start seeing the small system schedule in SDWARS?

A: Small water systems that monitor in 2018 will see their schedules first in SDWARS. Schedules were identified on their monitoring review sheet for small water systems. EPA's implementation contractor, GLEC, prepared the 2018 monitoring review sheets first, and will continue to work on 2019 and 2020 as we get closer to the monitoring time frame for 2018 monitoring. Some states agreed to review inventory and do sampling for small water systems. These water systems should contact their state for more information.

Q: Do both official and technical contacts have the same capabilities for uploading, reviewing, and accepting data in SDWARS?

A: If they have established accounts as PWS representatives, the official and technical contacts will have all the same functionalities. This includes capabilities for uploading, reviewing, and accepting data in SDWARS.

Q: I updated the schedule month and year and it auto updated the months correctly for consecutive samples, but not the year.

A: Please contact the CDX Help Desk at (888) 890-1995 or helpdesk@epacdx.net for SDWARS registration and technical issues. Providing details and screen shots will better enable the Help Desk to solve the issue.

Q: What information will be available to states in SDWARS?

A: Representatives from the states will be able to review or download the inventory, schedule, contacts, email notification history and results from the water systems in their state.

Q: Is there a specific format for creating sample point ID?

A: This is limited to a 25-character string. No specific format is required.

Q: How can we find out which states are providing inventory (i.e., large system inventory (LSI)) for each PWS?

A: States that provide inventory for their PWSs generally notify the systems. When inventory from an LSI is uploaded into SDWARS, affected PWSs with an active SDWARS account will be notified of the added inventory.

Q: Follow up to the method blank (MB) question. Can an analyte be reported to SDWARS with a MB detect and the associated analyte was a non-detect (<MRL) in the field sample?

A: No. The MB must be less than 1/3 the MRL; any MB result greater than 1/3 the MRL is a QC failure.

Q: In regards to the CDX, if the previous person in charge left without leaving access to the previous forms filled out, can we request to have access to that account or will we need to create a new CDX account?

A: You will need to create a new account. Please refer to the web site for specific instructions, https://www.epa.gov/dwucmr/reporting-requirements-fourth-unregulated-contaminant-monitoring-rule-ucmr-4. EPA suggests systems nominate more than one user to avoid this situation.

Q: Do laboratories notify systems when they put results in SDWARS for them?

A: Water systems can select to have SDWARS notify them when laboratories post data to their water system for review. The system can also specify arrangements for being notified by the laboratory in their contract with the lab.

Q: Is there any information required in the "Facility ID" in SDWARS or is it just a random identifier?

A: The Facility ID (including that used to document UCMR 4 HAA monitoring in the distribution system), is an identification code established by the state, or at the state's discretion, by the PWS. Each Facility ID follows the format of a 5-digit number unique within each PWS for each applicable facility (i.e., for each source of water, treatment plant, distribution system, or any other facility associated with water treatment or delivery).

Q: Where are the naming requirements for data elements posted? Could they be added to the SDWARS website UCMR 4 section?

A: A table of reporting requirements can be found in 40 CFR 141.35(e) and on our website (https://www.epa.gov/dwucmr/reporting-requirements-fourth-unregulated-contaminant-monitoring-rule-ucmr-4).

Q: We have multiple plants with addresses with different zip codes. What zip codes are we reporting? A: You should report all zip codes for your customers.

Q: Is MIOX listed as one of the disinfectant methods?

A: This disinfection method is not specifically listed, however, there is an option to select "other" in the disinfection field.

XI. Risk Communication

Q: As stated in the Consumer Confidence Report (CCR) regulation, the most recent compliance data (that is five years old or less) must be reported in the CCR. Is UCMR data considered to be compliance data? If not, is reporting UCMR data in one CCR (not five) adequate reporting?

A: Unregulated contaminants detected during UCMR monitoring must be reported in a CWS's CCR following the year they were received. For additional information see 40 CFR Subpart O and https://www.epa.gov/ccr.

Q: Will the results of the raw water sampling be required to go on the CCR?

A: TOC and bromide are not UCMR 4 contaminants (only indicators) (40 CFR 141.40(a)(3) table 1 footnote e), and are not required to be reported on a CCR (40 CFR 141.35(b)(1)).

Q: The UCMR 3 results in the National Contaminant Occurrence Database (NCOD) on EPA's website were listed as "draft" until finalized in 2017. Do water systems need to report "draft" data in their CCRs for UCMR 4?

A: The status of the UCMR 3 dataset as a whole does not affect your CCR requirements. UCMR results must be summarized in a CWS's CCR report following the year they were received. The UCMR 3 NCOD dataset was not complete until January 2017 because monitoring results are added and possibly removed or updated over the course of the reporting cycle. In addition, these results are subject to change following further review by the analytical laboratory, the PWS, the State and EPA. Thus, the NCOD data set was characterized as draft.

Q: What are the requirements for reporting UCMR data for the small systems that are not subject to UCMR sampling, but use purchased water from the system that is the subject for UCMR? What if it is a 100% purchased water?

A: A water wholesaler must provide the retailer with monitoring and other information by April 1st of each calendar year to produce the CCR. If the wholesaler is subject to UCMR monitoring, small systems purchasing from the wholesaler and not already subject to UCMR would need to include the wholesaler's monitoring information in the CCR.

Q: For the 2016 CCR, we don't have to report UCMR results that we already reported for 2015 CCR correct?

A: The 2016 CCR will include data collected/received in 2015. CWSs do not need to republish UCMR data from previous reports.

Q: How do we avoid people like the public/press from taking the reference concentration for UCMR 4 as being a level of concern? This was a major problem with UCMR 3 data.

A: The CCR table must contain detected unregulated contaminants, for which a CWS is required to monitor, including the average and range at which the contaminant is detected. The report may include a brief explanation of why the CWS is monitoring for unregulated contaminants and this explanation can provide context for reference concentrations. The "Preparing Your Drinking Water Consumer Confidence Report Guidance for Water Suppliers" provides the following example statement: "Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether the Agency should consider regulating those contaminants in the future. EPA is exploring possibilities for clearer risk communication."

Q: For the regulated HAAs, does the UCMR data get included/combined with the D/DBPR data on the CCR?

A: We recommend that the UCMR 4 results (including UCMR 4 HAA6 Br and HAA9 results), be reported in the CCR in a section separate from the compliance-monitoring results for regulated contaminants. Since CCR requirements for UCMR apply to detection of *unregulated* contaminants, and since HAA5 is regulated, UCMR 4 HAA5 results do not need to be reported in the CCR. If the UCMR 4 HAA5 monitoring is scheduled to coincide with the D/DBPR HAA5 compliance monitoring (i.e., if the monitoring serves both purposes), those results would be reported on the CCR as D/DBPR data.

Q: Did the public notification requirement change? I thought it used to be notification to the public within three months?

A: The Public Notification Rule requires PWSs to provide special notices for certain situations, including the availability of UCMR data (40 CFR 141.207). Special public notices are different from other public notices because they do not have to contain all the elements required of other types of public notices. Instead, systems need only report the UCMR results that are available, and provide a phone number or contact where the results can be obtained. EPA encourages systems to describe why the system is monitoring for these contaminants, explain health effects information and health risks, and provide context for the results. Public notice must be made within 12 months after the results are known and systems can use their CCR to provide the required public notice if all timing and delivery requirements can be met. The public notification requirements also address a PWS's failure to meet UCMR monitoring requirements (40 CFR Appendix A to Subpart Q of Part 141).

Q: Can EPA provide support to make it clear that UCMR 4 data is not compliance data - but only information for water quality evaluation?

A: EPA will continue to convey the message (including in our Data Summary), that UCMR is a national occurrence-data collection program, and that the contaminants are not regulated under the NPDWRs (40 CFR part 141).

XII. Miscellaneous

Q: The URL listed on slide #14 and #135 does not seem to work - I get "Page not found" - can we get a corrected URL for the National Occurrence data link Please?

A: Copying and pasting the URL into the browser address bar will work. The link is: http://www.epa.gov/dwucmr/occurrence-data-unregulated-contaminant-monitoring-rule.

Q: Manganese is already a secondary contaminant. Why is it included in the UCMR?

A: Any contaminant without a primary NPDWR could be a candidate for UCMR. Secondary NPDWRs are for contaminants that may cause cosmetic or aesthetic effects. Manganese was identified as a contaminant of interest based on its inclusion in CCL 4.

Q: Will metals be included in all small-system monitoring?

A: Yes. 800 small systems will monitor for manganese and germanium under UCMR 4.

Q: Butylated Hydroxyanisole (BHA) is a common FDA approved food additive - it is pretty much hydrophobic - can you explain why it is included in the Semivolatile Organic Chemical monitoring? A: BHA is on CCL 4, has been detected in ambient water studies conducted by the United States Geological Survey (USGS), is moderately persistent in water, and is a possible carcinogen.

Q: Could you please remind us where we can find the appropriate sample location guidelines for each of the contaminants.

A: Please see the UCMR 4 website for supporting documentation such as fact sheets: https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule.

Q: When will EPA provide the electronic data deliverable (EDD) requirements?

A: The file formats (text and XML) for laboratories to upload data to SDWARS will be made available this fall.

Q: Will professional development hours be issued for the UCMR 4 webinar?

A: States may issue continuing education credits for participation on the UCMR 4 webinar.

Q: How do we find out if our state is a 'partner state' and will be providing information on our behalf?

A: EPA encourages partnering states to inform their water systems of the voluntary services they will be providing, because the level of involvement varies by state.

Q: Where can I access all four cycles of UCMR?

A: Details on previous cycles of UCMR can be found on the UCMR main webpage at https://www.epa.gov/dwucmr.

Q: Will the webinar and questions & answers be available on-line afterwards for people who are not able to participate today?

A: The webinar was not recorded; however, the slides are very detailed and the presentation did not deviate from them. The slides are posted to the website at https://www.epa.gov/dwucmr/unregulated-contaminant-monitoring-rule-ucmr-meetings-and-materials. This Questions and Answers document will be sent to all meeting participants.

Q: It would be helpful to have a summary of health risks and health effects for the contaminants including chronic vs. acute vs. developmental health effects. Can/will EPA please provide this?

A: With the first posting of analytical data in NCOD, we will also post the UCMR 4 Data Summary. The UCMR 4 Data Summary will include a table with the MRLs, reference concentrations, critical health endpoint, exposure duration and a link to the EPA reference which provides more health effects information. The following represent some of the primary EPA websites that contain health effects information: Integrated Risk Information System (IRIS), Office of Pesticides Program (OPP) and Office of Water — Drinking Water Contaminant Human Health Information.