FEBRUARY 2014

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Drinking Water Program

Public Water Systems Newsletter

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Spring Training for Small Non-Community Systems (guest ranches, campgrounds, etc)

Did you miss our training last year? Then you are in luck as EPA is again conducting training for transient non-community (TNC) public water systems EPA Region 8 will be giving another half day training in Casper at the Wyoming Association of Rural Water Systems (WARWS) conference the week of April 21st. We also hope to hold another training in the north part of Wyoming in the late spring, so keep an eye out for more details. We will demonstrate drinking water sampling and provide tips and tricks to staying compliant with Safe Drinking Water Act requirements. We will also review and answer questions about why you are a public water system, trouble shooting techniques and other questions that you have. We will email information about the training to TNC systems as we get closer to the training dates. If you have any questions in the meantime, feel free to contact Tiffany Mifflin at 303-312-6521 or Bre Bockstahler at 303-312-6034

NEW EPA Region 8 Rule Manager!

In 2013, we welcomed a new staff member, Kendra Morrison, to the drinking water team! For a complete list of current contacts and EPA staff, please see the updated contact list on our website at: http://www2.epa.gov/sites/production/files/documents/contactlist.pdf

Kendra Morrison is the new manager for the Consumer Confidence Report (CCR) Rule, and will be supporting the Wyoming DEQ in their role to enhance capacity development. Kendra is your main point of contact for questions about the CCR Rule. Prior to joining the drinking water team, Kendra worked in the Air Program for ten months serving as lead on the solid waste incinerator rules and reviewing major source permits. She also worked in Region 8's Resource Conservation and Recovery Program for fourteen years on a variety of solid and hazardous waste issues, including serving as industrial materials recycling coordinator to increase the safe beneficial use of the byproducts from industry into construction applications such as roadways and buildings. Prior to joining EPA, Kendra worked for state and local governments in air quality, remediation, and consumer protection. Kendra is an environmental scientist by education with a concentration in environmental engineering and sustainable urban infrastructure.

Use Only Certified Labs for Water Sampling Analyses

Attention all Public Water Systems, please make sure you are submitting your compliance sample results from EPA certified laboratories. Data received from noncertified labs will be rejected and you will have to resample. Please visit http://www2.epa.gov/sites/productionfiles/2013-09/documents/certifiedlabs_0.pdf for a list of certified labs.

How to Avoid a Significant Deficiency for not Cleaning and Inspecting your Finished Water Storage Tank within 10 years

Whether you have the best ground water source or best surface water treatment, all systems still have some level of turbidity entering the distribution system. Turbidity will accumulate in low velocity areas like storage tanks. The resulting sediment not only provides a matrix for microbial growth, but can shield pathogens from chlorine, thus preventing adequate inactivation. The American Water Works Association (AWWA) Manual of Water Supply Practices M42 recommends storage tanks be drained, cleaned, inspected and disinfected every three years and, where sediment is a problem, washed out annually. This frequency is sufficient to remove bacteria before it begins to cause total coliform problems, and provides the opportunity to repair minor tank and coating failures before they lead to major and very costly repairs or tank replacement.

Beginning with the sanitary surveys conducted in 2013, the EPA is now issuing significant deficiencies to water systems that have not cleaned and inspected their finished water storage tanks within the last 10 years. Failure to address significant deficiencies can lead to a violation. EPA recommends that water systems clean and inspect their tanks every three years per the AWWA Manual.

To clean and inspect tanks, EPA recommends that you contract with a professional tank inspection and cleaning company to have these services performed. It is also acceptable to perform the cleaning and inspection in house as long as the staff performing these tasks has the required safety training and certification, and the tank is disinfected properly prior to being put back into service. Once completed, keep a copy of the inspection report in an accessible location for review during your next survey.

If you have any questions regarding this requirement, contact Bob Clement at 303-312-6653.

Public Version of Drinking Water Watch Now Available

EPA Region 8 is pleased to announce that we have created a version of Drinking Water Watch (DWW) accessible to the public without a username and password. Among the information available through this website are sample schedules and results of drinking water quality analyses, regulatory violations and enforcement actions. The contents of the website are updated continuously based on information received from the water systems and/or the certified drinking water labs.

The first screen of this website requires users to select whether they are searching for a water system in either Wyoming or Region 8 Tribes. Once selected, the user is taken to the search page where they can search for water systems by public water system (PWS) name or ID#, county (Wyoming only), type of water source, etc.

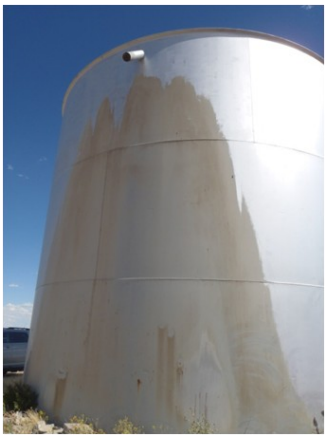
EPA Region 8 will also continue to maintain the full version of DWW for water systems to use with their login credentials. In addition to the above information, the full (non-public) version of DWW provides copies of your water system schematic, past sanitary survey reports, the latest reminder to sample and report, and the sampling forms for use with chemical and radiological samples (see separate article on these forms).

This public access version of DWW is available at https://sdwisr8.epa.gov/Region8DWWPUB/.

For questions or further information, please call Tsegaye Hailu at 303-312-6273 or email to hailu.tsegaye@epa.gov or call Charles Weinberg at 303-312-6557 or email to weinberg.charles@epa.gov.

Public Water Systems - Sanitary Surveys and Significant Deficiencies

The EPA is required to conduct sanitary surveys at Wyoming and Tribal Community public water systems once every 3 years (with certain exceptions). Sanitary surveys at noncommunity systems may be conducted at up to 5 year intervals.



Finished water storage tank overflow that does not discharge at 12" – 24" above a splash pad.

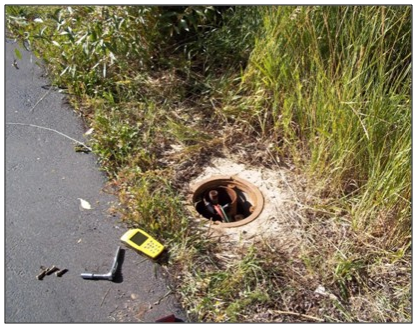
If you recently had a survey conducted, you may have been notified about significant deficiencies found at your water system. Unlike recommendations, which we encourage you to address, **Significant Deficiencies must be addressed because they have the potential to cause, or are causing, the introduction of contamination into the finished drinking water.**

Your notification of Significant Deficiencies is contained in the cover letter attached to your sanitary survey report, and you must respond to EPA within a stated time frame (30 or 45 days, depending on your water source). Your response must include a schedule and plan for addressing those Significant Deficiencies.

Failure to respond to EPA in writing within the specified time frame, or failure to address the Significant Deficiencies per the approved schedule – and provide adequate documentation to EPA of the corrections – are considered violations of the Drinking Water regulations.

In order to help you prepare for upcoming sanitary surveys, and to self-assess your system for Significant Deficiencies prior to your survey, a list of the most frequently identified deficiencies is included below. Please review the Tech Tips at http://www2.epa.gov/region8-waterops/system-and-operational-improvements-sanitary-surveys, and contact EPA if you have questions on how to remedy these Significant Deficiencies.

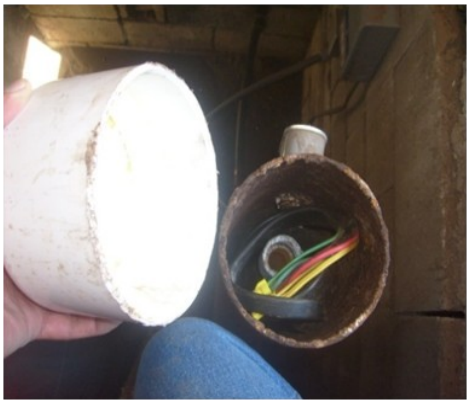
- **Lack of an Emergency Response Plan (templates may be found at the following website: http://www2.epa.gov/region8-waterops/reporting-forms-and-instructions-reporting-forms#erp)**
- **Lack of adequately certified operator**
- **Wellheads – no sanitary seal (missing bolts or gasket)**
- **Finished water storage tanks:**
  - **Vents– lack of #24 mesh, non-corrodible screen on vents**
  - **Overflows – lack of #24 mesh, non-corrodible screen or properly sealed flapper valve on overflow, which terminates 12 to 24 inches above splash pad**
  - **Not cleaned and inspected (with adequate documentation) within the last 10 years**
  - **Unknown integrity because surveyor cannot inspect roof (access hatches, vents, breaches) and you do not have recent descriptive photographs showing the condition of these components**



Wellhead that is not high enough above the ground.

Additional information about preparing for a sanitary survey can be found at:
http://www2.epa.gov/region8-waterops/preparing-your-drinking-water-sanitary-survey

Finished water storage tank overflow without the required #24 mesh screen (also debris inside overflow which can block water discharge and damage tank)



Wellhead that does not have a sanitary seal.

Would You Like to Have Your Lab Transfer All Your Microbial, Chemical and Radiological Test Results Directly to EPA Region 8?

When public water systems (PWSs) send their drinking water samples to laboratories for analysis, many of those labs store the sample results electronically. These labs then have the capability to transmit those results electronically to the EPA or other primacy agency through Electronic Data Interchange (EDI) on behalf of their clients. So far, EPA is receiving total coliform data via EDI for several PWSs in Wyoming and a few tribal PWSs in Montana. Some of these labs are also transmitting chemical and radiological (chemrad) data to us through EDI. Submission of lab reports through EDI has the advantages of quick transmittal and it eliminates potential errors from manual data entry at the EPA.

Region 8 is in the process of expanding the total coliform and chemrad EDI services from all labs that serve PWSs in our region. Attached below is a chart of the EDI capabilities of the primary labs used by Wyoming and Tribal water systems in Region 8. This shows which labs currently use EDI for bacteriological samples, which labs are in the process of getting the capability to use EDI for chemical and radiological analytes, and those that do not currently use EDI. If the lab you use has the capability for EDI for any analytes but is not using it, we encourage you to make arrangements with the lab to transmit your data to EPA through EDI. If any lab needs assistance to start using EDI, have the lab call Tsegaye Hailu at 303-312-6273 and we will work with them to set up the EDI process where it is possible.

Please note that the Safe Drinking Water Act (SDWA) stipulates that the ultimate responsibility for making sure that EPA receives all of your compliance data, including total coliform, rests with you, the public water system. So, to make sure that we have received your water quality data in our database, login to our Drinking Water Watch website at https://sdwisr8.epa.gov/Region8DWW/default.jsp and check. If for any reason monitoring data in compliance with SDWA is not received by EPA within the time stipulated by the National Primary Drinking Water Regulations (NPDWR), the water system will incur a potential non-compliance violation. Measures to mitigate any failure to submit data to EPA electronically should be discussed and agreed upon between the utility and the lab.

Labs who now use EDI to send Bac-T (TCR) data to EPA	**Labs now using EDI or working towards using it for nitrate, chemical and rads data**	**Labs not currently using EDI for any compliance report**
Energy Labs-Casper	Energy Labs-Casper	Teton County Water Lab
Energy Labs-Gillette	Energy Labs-Gillette	Sweetwater Cty-Environmental Health Lab
Energy Labs-Billings	Energy Labs-Billings	EnviroService (NE)
Energy Labs-Rapid City (coming soon)	Energy Labs-Rapid City	WY Dept of Agriculture Lab
Energy Labs-Helena (coming soon)	Energy Labs-Helena	Lander Valley Med Center
Lincoln Water Quality Lab-Afton		Inter-Mountain Labs-Sheridan
WY Dept of Health Lab		Inter-Mountain Labs-Gillette
Chemtech Ford-UT		Precision Analysis
		Mid-Continent Lab-SD
		ND Dept. of Health Lab
		SD Dept of Health Lab
		UT Dept of Health Lab
		CO Dept of Health Lab
		Cheyenne BOPU
		City of Craig
		National Park Service-Mammoth Water Quality Lab

Composite Sampling for SOCs, IOCs, and VOCs

To minimize sampling costs, Region 8 permits PWSs to reduce the total number of samples that must be analyzed by allowing the use of compositing. Compositing is the combining of water samples from separate sampling points into a single sample, then analyzing the single sample rather than analyzing multiple samples. For PWSs serving:

- More than 3,300 persons, an operator can composite up to 5 water samples within a single PWS (i.e. An operator can collect 5 water samples from 5 different sampling points and send the water samples to the lab. The lab will then combine equal parts of the 5 water samples into a single sample for analysis).
- Less than or equal to 3,300 persons, an operator can composite up to 5 water samples among up to 5 different PWSs (i.e. An operator can collect a water sample from up to 5 different PWSs and send the water samples to the lab. The lab will then combine equal parts of the 5 water samples into a single sample for analysis).

Samples must be composited at the lab and the lab must be EPA certified and use a method with a detection limit of 1/5th the MCL or less. If a contaminant is detected in the original composite sample (at a level greater than one-fifth of the MCL), then additional samples must be collected from each individual sampling point and must be analyzed separately for that contaminant within 14 days of learning of the composite sample's result. These follow-up samples must be analyzed for the contaminant(s) that exceeded one-fifth of the MCL in the composite sample. EPA will determine compliance based on the follow-up sample results. The PWS ID numbers or sampling locations that have been composited should be clearly indicated on the laboratory report that is submitted to EPA. Composite samples should be taken early in the calendar year in the event that additional samples are required to demonstrate compliance prior to the end of the calendar year.

PWSs should call the lab and notify them that they wish to composite samples and discuss any composite sampling with the lab prior to submitting the samples.

Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2) Updates

First, good news: Stage 1 TTHM/HAA5 compliance sampling ended on September 30, 2013. Then, not so good news: Stage 2 TTHM/HAA5 compliance sampling started October 1, 2013.

The Stage 2 compliance effective date for Community and Non-transient non-community systems that deliver chlorinated water for public use is no later than October 1, 2013. For quarterly scheduled systems, one sampling period must be in the system's peak historical month; therefore, as of this date, all of these systems have already completed at least a compliance period of sampling. For annual scheduled systems, the first sampling must be in the peak historical month after the compliance effective date; therefore, the first Stage 2 sampling for these systems will be in the peak historical month (usually the third quarter) of 2014.

Each system must prepare a Stage 2 Monitoring Plan and send to our office for approval at least 6 months prior to beginning the Stage 2 sampling. We have approved the Monitoring Plans for all quarterly scheduled systems; we have received Monitoring Plans from most of the annual scheduled systems.

If you have not submitted a copy of this Plan to our office, please prepare one and send it to us as soon as possible. You can check your Monitoring and Reporting Requirements for the Calendar Year 2014 (ToDoList 2014) which is enclosed with this newsletter. If we have not received your Stage 2 Monitoring Plan, your TODoList2014 would clearly indicate so under the Disinfection Byproducts Rule (Stage 2 TTHM/HAA5). We have developed a template to help you complete your Monitoring Plan. You can download a copy of the Stage 2 Monitoring Plan Template at the Drinking Water Online website at www2.epa.gov/region8-waterops.

Stage 2 compliance calculation is also changed and is based on locational running annual average (LRAA) for quarterly scheduled systems. You can go to the Drinking Water Online website stated above to download a copy of the TTHM/HAA5 LRAA calculation form for your future use. In order to ensure you receive proper credit for your TTHM/HAA5 compliance samples, it is very important to have the address of each sampling location clearly identified on your sampling sheet.

If you have any questions, or need help on this new rule, please contact Mary Wu at 303-312-6789, or email her at wu.mary@epa.gov.

Chemical/Radiological Sampling Form Available

EPA Region 8 has created a sampling form for use with all chemical and radiological (ChemRad) compliance samples (except disinfection byproducts (DBP) . This form helps you to avoid monitoring errors by clearly showing information required for each type of sample, such as:

- Where to sample (which sampling point), and
- What tests should be performed by the laboratory

The ChemRad Sampling Form is available in Drinking Water Watch (DWW). To use the ChemRad Sampling form, follow these simple steps:

1. Login to DWW at https://sdwisr8.epa.gov/Region8DWW/JSP/loginForm.jsp
2. On the first screen, click on the **Sample Schedules, Reminders, and ChemRad Sample Form** on the **Links** menu on the left-hand side of the screen.
3. On the second screen, click on **Latest Reminder to Sample and Report and ChemRad Sample Form** in the middle of the page (toward the top of the page).
4. On the third screen, if there are still samples to be collected that year, you will be able to create a printable form by clicking on the **ChemRad Sample Form**. If there are no additional required samples, the link to the form will not be shown.
5. On the fourth screen, select a sample requirement (or type of sample to be collected, such as nitrate) from the dropdown menu and click on the "Generate ChemRad Sample Form" button to create the form.
6. The form will open in a separate window as a PDF file. The form will be pre-populated with your water system name and PWS ID#, the water system facility (WSF or facility where the sample should be collected), the number of samples required, the sampling period and finally the analytes to be tested by the lab.
7. Print the form.
8. Fill in the following information on the form: water system's mailing address, email address, fax number, and phone number; sample collector's name; sample collection date and time; and laboratory name. Additional information is required for composite samples.
9. Finally, it is important that you submit the form to your lab along with the sample(s) and the Lab Slip.
10. Repeat steps 5 through 9 for each type of samples required this year.

TIP: *Printing your entire sample forms at the beginning of the year, and having them ready for use when the actual sampling takes place, can save you time. Please note that the reminders in DWW only show what is required during the current calendar year.*

Reduction of Lead in Drinking Water Act

The Reduction of Lead in Drinking Water Act was effective on January 4, 2014. The Reduction of Lead in Drinking Water Act changes the Safe Drinking Water Act definition of "lead free." As in the past, the Safe Drinking Water Act prohibits the use of any pipe or plumbing fitting or fixture, any solder, or any flux that is not lead free in the installation and repair of (i) any public water system; or (ii) any plumbing in a residential or non-residential facility providing water for human consumption. Effective January 4, 2014, lead free means:

- not containing more than 0.2 percent lead when used with respect to solder and flux; and
- not more than a weighted average of 0.25 percent lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.

The EPA has posted on its Web site a revised list of frequently-asked-questions to assist water systems, manufactures, retailers, regulators and the general public in complying with and understanding the requirements of the Reduction of Lead in Drinking Water Act. The FAQs address the definition of lead free, the effective date, calculating lead content, 3rd party certification, product labeling, repair and replacement parts, and exemptions. The FAQs can be found at: http://water.epa.gov/drink/info/lead/upload/epa815s13001.pdf.

If you have questions please contact:
Robert Clement - 303-312-6653 or clement.robert@epa.gov, or
Kim Le -303-312-6973 or le.kim@epa.gov

Revised Total Coliform Rule

You may have heard about the forthcoming RTCR but do not panic, we have plenty of time to make adjustments or find new jobs! All kidding aside, the revisions will not take effect until April 2016 and there will be plenty of training and guidance to help in making the transition. In a nutshell the RTCR requires systems vulnerable to microbial contamination to identify and fix existing problems that allow contaminants to enter the water supply. All systems will be required to conduct an assessment when monitoring results show potential vulnerabilities (more than one TC+ result is considered a potential vulnerability that triggers an assessment; this differs from how the existing TCR rule calls it a TCR MCL violation). These assessments allow the operator or the EPA to take a more direct approach to evaluate the system and identify sanitary defects which may be the likely cause of coliform problems. Additionally, there will also be minor changes to the number of required repeat and additional routine samples. Seasonal systems will have some big changes in that an EPA-approved start-up plan must be completed prior to serving the public for the season. Under these revisions, sample siting plans will continue to be necessary, so be sure to update yours today! If you have any immediate questions, you can consult http://water.epa.gov/lawsregs/rulesregs/sdwa/tcr/regulation_revisions.cfm and be sure to keep an eye out for training as Region 8 will begin RTCR training later this year.

Consumer Confidence Report (CCR) Certification Due to EPA by October 1 Each Year

What is the difference between a Consumer Confidence Report (CCR) and a CCR certification? The purpose of the CCR or annual drinking water quality report is to raise customers' awareness of where their drinking water comes from, the quality of their drinking water, what it takes to deliver water to their home, and the importance of protecting drinking water sources. The information in the report can encourage consumers to become more involved in decisions which may affect their health, and water systems can use the report to their advantage to explain how their community's drinking water supplies are protected through the services that they provide. Community water systems must send the CCR to their consumers and the EPA by July 1st each year.

The CCR Certification, on the other hand, is a form that is used by community water systems to certify that the report was distributed to its customers and is due to EPA by October 1st each year. The certification form documents how the CCR was mailed or otherwise directly delivered to each customer and the date(s) for distribution.

The CCR Certification Form for community water systems was updated in April 2013 to include electronic delivery methods and is available on our website at http://www2.epa.gov/region8-waterops/reporting-forms-and-instructions-reporting-forms#ccr.

Both the CCR and the Certification Form must be submitted annually or a violation may be issued. For questions, please contact Kendra Morrison, CCR Rule Manager, at (303)312-6145.

Monitoring Requirements for Back-up or Emergency Wells

If you wish to keep wells on-line (i.e physically connected to your system) for a backup source and/or for emergencies, you must monitor those wells for compliance in the same way you would if the well was used on a regular basis. Inactive wells are wells have been either:

- Plugged and abandoned or
- Physically disconnected from the system. Note: physically disconnected means either:
  - the line from the well to the pumphouse or to the transmission line is severed and properly capped, or the pump is removed, or
  - the power source to the well pump is physically disconnected (e.g. wires removed) such that an electrician is needed to restore power, and the well is valved off to keep stagnant water from the system.
  - Closing a valve or simply turning off power to the well is not considered a physical disconnection.

Inactive wells do not have to be regularly monitored.

Before you reconnect any inactive wells for use as a source, contact the EPA to learn what your monitoring requirements are. We recommend you place a sign on your inactive wells (or near the spare parts needed to reconnect them) to remind you to call the EPA before the well is reconnected and used.

Total Coliform Rule Sample Siting Plans

Operators - we still have not received many sampling plans.

Do not forget that every water system needs to submit a sample siting plan as a part of their Total Coliform Monitoring requirements. If you cannot remember submitting a plan, then it has probably been too long. The purpose of the sample siting plan is to identify the specific locations where you intend to collect bacteriological samples for the given year. This plan will assist you in ensuring your system's entire distribution is properly represented in your sampling scheme. You should also consider factors such as access to sample taps as well as sites where you could potentially collect repeat samples should the need arise. Your sample siting plan should be updated regularly to account for any distribution system changes.

If you have any questions or want further assistance please contact TCR Rule Manager Bre Bockstahler at 303-312-6034.

Building Your Water System's Technical, Managerial and Financial Capacity

Capacity development is an important component of the Safe Drinking Water Act's (SDWA) focus on helping water systems prevent problems in drinking water. It refers to the process of planning for, achieving and maintaining adequate technical, managerial, and financial (TMF) capabilities necessary to enable public water systems to comply with the drinking water standards and provide safe drinking water on a consistent basis.

There are many resources and tools available to address adequate TMF capabilities. A few of them are highlighted below. Other resources are available on EPA's website at http://water.epa.gov/type/drink/pws/smallsystems/.

Technical

Control and Mitigation of Drinking Water Losses in Distribution Systems — This document provides information on tools and techniques that help systems tailor a program to meet water loss prevention needs and maintain infrastructure. A successful water loss prevention program will help the system balance its resources used to address economic restrictions, water availability, population and climate changes, regulatory requirements, operational costs and public and environmental stewardship. http://water.epa.gov/type/drink/pws/smallsystems/upload/Water_Loss_Control_508_FINALDEc.pdf

Managerial

Gaining Operational and Managerial Efficiencies Through Water System Partnerships — These case studies of system partnerships provide examples of the many different approaches to forming partnerships, strengthening relationships, and achieving managerial and operational efficiencies. http://www.epa.gov/ogwdw000/smallsystems/pdfs/casestudies_smallsystems_gainingoperational.pdf

Financial

Asset Management: A Best Practices Guide — This guide provides a comprehensive overview of how to implement an asset management program, including such issues as maintaining or replacing equipment, setting water rates, and providing consistent quality service to customers. It guides systems through five core questions that serve as the foundation for many asset management best practices and as the starting point for developing an asset management plan. http://www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_assetmanagement_bestpractices.pdf

In 2014, EPA Region 8 will be enhancing its focus on capacity development. If you have specific TMF needs that you would like to have assistance in addressing, please contact our Capacity Development Coordinator, Kendra Morrison, at morrison.kendra@epa.gov or (303)312-6145.