2015-2016 Training Dates
A copy of the training schedule for 2015 through August 2016 can be found at our website www.kdheks.gov/water/www.html training dates are as complete as we know at this time. We have no control over scheduling changes that training sponsors may make. Each organization sponsoring a training event reserves the right to change training topics, dates or locations. In previous years, more training has been added throughout the year. If you have questions about specific training events, please contact the training sponsor listed on the schedule. The addresses, telephone numbers and e-mail addresses of the training sponsors are on page 6.

2015-2016 Exam Dates
The table at the beginning of the operator training and testing calendar (page 1) contains a list of examination dates for the upcoming year. These testing opportunities are the only ones that will be scheduled for the year. No other exams will be scheduled. Please note that several of the exam sites have a maximum occupancy listed. Plan ahead and make sure KDHE receives your exam application before the deadline indicated for each exam date.

Frequently Asked Questions Regarding the Operator Certification Program

How do I become a certified water or wastewater operator?
Each operator must meet the following requirements:
1) Currently own or be employed by a water supply system or wastewater treatment facility.
2) Have a high school diploma or GED.
3) Have acquired the minimum number of years of experience for the class of examination desired.
4) Have acquired the minimum number of points for the class of examination desired. Points are awarded based on experience, education, and training. (see the table below).

<table>
<thead>
<tr>
<th>Class</th>
<th>Points*</th>
<th>Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small System</td>
<td>12.5</td>
<td>6 months</td>
</tr>
<tr>
<td>Class I</td>
<td>13</td>
<td>1 year</td>
</tr>
<tr>
<td>Class II</td>
<td>14</td>
<td>1 year</td>
</tr>
<tr>
<td>Class III</td>
<td>16</td>
<td>2 years</td>
</tr>
<tr>
<td>Class IV</td>
<td>18</td>
<td>2 years</td>
</tr>
</tbody>
</table>

*For further information on how the points are calculated see the Operator Certification Education, Training and Experience Requirements brochure on KDHE’s Operator website.

Once the minimum requirements are met, the operator must submit an examination application form, and a $25.00 examination fee to KDHE.

Is training required prior to taking a certification exam?
While training is not a requirement prior to certification, KDHE believes that training is helpful in obtaining initial certification.
Where can I find study material for certification exams?
KDHE recommends the water and wastewater training manuals published by the University of California-Sacramento. The website for these manuals is www.owp.csus.edu

KDHE also has Kansas Small Water and Wastewater Manuals. To request a copy please contact our office.

How can I obtain an Application for Water or Wastewater Certification Exam?
You can obtain an application from KDHE’s website www.kdheks.gov/water/www.html or by contacting our office. KDHE will be offering fewer certification examinations so it is important to plan ahead and mail your application in as soon as possible. All facilities that KDHE uses to give exams have a maximum occupancy limitation that is set by the state Fire Marshall. Therefore, applications will be accepted on a first come first serve basis until the maximum occupancy has been reached. Remaining applications will be returned unprocessed. KDHE recommends that the application along with a copy of your high school diploma, high school transcript or GED and the $25.00 exam fee be mailed a minimum of three – four weeks prior to the deadline. PLEASE NOTE: KDHE can no longer accept exam applications by fax or email.

Why does the exam application have to be post marked and received in the KDHE office no later than two weeks before the exam date?
We have to screen all applications to ensure the applicant meets the minimum qualifications for the examination. With as many as 200 examinations given at one test site, two weeks is the minimum time necessary to evaluate the application and prepare examination packets for each applicant.

Certificate Renewals
Water and wastewater operator certificates must be renewed every two years from the date that the certificate was issued. It is the responsibility of the certified operator to make sure that their certificate is renewed prior to the expiration date. KDHE will mail a renewal letter at least 60 days prior to the certificate expiration date to the address we have on file. The operator must have met his/her training requirements and pay the $20.00 renewal fee prior to the expiration date in order to renew their certificate. If the certificate is not renewed by the expiration date, the operator is considered to be no longer certified and will be removed from the certified operator database. If the system has only one certified operator the system is non-compliant which could lead to enforcement action by KDHE.

How many hours does an operator need to attend to renew their certificate?
Small System operators are required to acquire five (5) hours every two years. Class I-IV operators are required to acquire ten (10) hours every two years.

What type of training do I need to attend?
Training must be directly related to the subject matter of the certificate the operator holds. If the training is pertinent to water supply and wastewater operators (pump maintenance, for example). KDHE will split the total hours between water and wastewater credit, unless the operator specifies otherwise.

How do I know if the training has been approved by KDHE?
All the training listed on the training calendar has been approved by KDHE. For other training not listed on the training calendar, verify with the training provider that the training has been approved by KDHE.
What if the required training is not acquired before the renewal expiration date?
If you fail to obtain continuing education prior to your renewal date, your certificate lapses, you are not officially certified and you will be dropped from our roll of Kansas certified operators. **If you are the sole certified operator for your facility the facility will be non-compliant for not being under the supervision of a certified operator.** You may request to be reinstated to the certified operator roll. Certificate can be only reinstated up to two years from the certificate expiration date. After obtaining your continuing education hours, you will have to pay a reinstatement fee. **Until the continuing education is obtained and the reinstatement fee paid, you are not a Kansas certified operator.**

What training records should I keep?
Although KDHE maintains individual operator training records from cooperating training providers, it is the operator’s responsibility for maintaining their own training records. Documentation of attendance at each training event should be maintained.

Can an operator check their own renewal and training information?
KDHE has established real-time internet access to operator data. To access the operator database go to [www.kdheks.gov/water/www.html](http://www.kdheks.gov/water/www.html) and click on Certified Operator Database. Once you have gained access to the operator database, you will be able to review operator renewal dates and continuing education hours. Operators can also email KDHE change of address, employment, etc. directly from the site.

Instructions on how to access the Certified Operator Database can be found on the above listed KDHE website.

**Plan Ahead**
Planning ahead will make life easier. Check the expiration date on your water and/or wastewater certificate/wallet card. K.A.R. 28-16-31(b) requires that all Small System certified operators obtain at least 5 hours of approved training and Class I-IV certified operators obtain at least 10 hours of approved training for each certificate held during the two year renewal prior to the expiration date. If you need continuing education hours for renewal this year, please make it a **PRIORITY** now to attend training. Don’t put it off until the month before your certificate expires. Planning ahead will ensure that you are able to attend the type of training you want to attend and at a location near you. **PLEASE** note, do not send money for renewal unless you have the required continuing education hours. Your money will be returned.

If there are other questions that have not been addressed, please do not hesitate to contact either Teresa Schuyler 785.296.5511 or Vickie Wessel 785.296.2976 or for a quicker response you can email us at tschuyle@kdheks.gov or vwessel@kdheks.gov
Public Water Supply Section Update
During the past year the Public Water Supply Section (PWS) welcomed new personnel and reorganized responsibilities among the Units within the Section. The chart below reflects the current organization structure of the PWS Section.

Three new employees joined the Compliance and Data Management Unit. Rick Wiedemann – Unit Chief, Melissa Sitze – Compliance Officer, and Angela Unrein – Compliance Officer. The Data Management and Compliance Unit are responsible for maintaining the Safe Drinking Water Information System (SDWIS), developing and maintaining monitoring schedules, and compliance determinations for Safe Drinking Water Act regulations. As the Unit Chief, Rick has overall responsibility for the Data Management and Compliance Unit and supervises the four compliance officers within the Unit. Melissa is the Compliance Officer responsible to chemical monitoring (IOC, VOC, SOC, nitrate and radiological) and the Groundwater Rule. Angela has responsibility for the Lead and Copper Rule and the Disinfection and Disinfection Byproducts Rule. Jean Herrold continues to have responsibility for the Total Coliform Rule and Dianne Sands continues to have responsibility for the Surface Water Treatment Rule.

Other changes in the PWS Section include the retirement of Section Chief Darrel Plummer in March 2015 and the appointment of Cathy Tucker-Vogel as the new Section Chief in August. The Section also looks forward to the addition of Brenda Diegel, France Parks-Rice, Peggy Lewis and Wade Keitel. Brenda, Frances, Peggy and Wade will work under
William Carr in the SRF Unit and will have responsibilities for both the Clean Water and Drinking Water revolving loan programs.

The Capacity Development and Enforcement Unit is responsible for implementation of the Kansas Capacity Development Strategy including training and technical assistance activities, coordinating enforcement activities, development of new regulations and coordination of activities with the KDHE district offices. The Unit Chief position is currently vacant.

The Engineering and Permits Unit is responsible for plan review and approval, permit issuance and blue-green algae response for PWS systems. There were no staffing changes in the Engineering and Permits Unit during the past year. Please see the table below for contact information for the PWS Section.

<table>
<thead>
<tr>
<th>Section Chief:</th>
<th>Cathy Tucker-Vogel, <a href="mailto:ctuckerv@kdheks.gov">ctuckerv@kdheks.gov</a></th>
<th>(785) 296-5514</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engineering &amp; Permits Unit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Area of Responsibility</strong></td>
<td><strong>Contact Name</strong></td>
<td><strong>Email</strong></td>
</tr>
<tr>
<td>Unit Chief</td>
<td>Dan Clair</td>
<td><a href="mailto:dclair@kdheks.gov">dclair@kdheks.gov</a></td>
</tr>
<tr>
<td>Engineering Plan Review</td>
<td>Rex Cox</td>
<td><a href="mailto:rcox@kdheks.gov">rcox@kdheks.gov</a></td>
</tr>
<tr>
<td>Engineering Plan Review</td>
<td>Gyanendra Prasai</td>
<td><a href="mailto:gprasaki@kdheks.gov">gprasaki@kdheks.gov</a></td>
</tr>
</tbody>
</table>

| **SRF Loan Program** | | |
| **Area of Responsibility** | **Contact Name** | **Email** | **Phone** |
| Unit Chief | William Carr | wcarr@kdheks.gov | (785) 296-0735 |
| Financial Transaction Oversight | Brenda Diegel | bdiegel@kdheks.gov | (785) 296-4262 |
| Disbursement Requests & Maintain Files | Frances Park- Rice | fparksrice@kdheks.gov | (785) 296-5258 |
| Disbursement Requests & Maintain Files | Peggy Lewis | plewis@kdheks.gov | (785) 296-5538 |
| Construction Inspections | Wade Keitel | wkeitel@kdheks.gov | (785) 296-1988 |

| **Data Management & Compliance Unit** | | |
| **Area of Responsibility** | **Contact Name** | **Email** | **Phone** |
| Unit Chief | Rick Wiedmann | rwiedmann@kdheks.gov | (785) 296-5514 |
| Lead & Copper, Disinfection Byproducts | Angela Unrein | aunrein@kdheks.gov | (785) 296-5946 |
| Chemical Monitoring (IOC, VOC, SOC, Nitrate, Radiological) | Melissa Sitze | msitze@kdheks.gov | (785) 368-8336 |
| Surface Water Treatment | Dianne Sands | dsands@kdheks.gov | (785) 368-8336 |
| Bacteriological Monitoring & GW Rule | Jean Herrold | jherrold@kdheks.gov | (785) 296-5518 |
| Monitoring and Compliance Coordinator | Dianne Sands | dsands@kdheks.gov | (785) 368-8336 |

| **Capacity Development & Enforcement Unit** | | |
| **Area of Responsibility** | **Contact Name** | **Email** | **Phone** |
| Unit Chief | Vacant | | |
| Enforcement and Regulations | Andrew Hare | ahare@kdheks.gov | (785) 296-5946 |
| Annual Compliance Reports, CCR | Patti Croy | pcroy@kdheks.gov | (785) 296-3016 |
| PWS Inventory & Data Requests KEAP Registration | Christi Huard | chuard@kdheks.gov | (785) 296-7111 |
| PWS Contact Changes KEAP Registrations | Karrie Ullery | kullery@kdheks.gov | (785) 296-6340 |
No Joke, RTCR April 1, 2016

History
The Revised Total Coliform Rule (RTCR) builds upon the original 1989 Total Coliform Rule designed to limit microbial contamination in Public Water Supply Systems (PWSS) and increase public health protection. In an effort to strengthen public health protection, the Safe Drinking Water Act (SDWA) requires the Environmental Protection Agency (EPA) to review National Primary Drinking Water Regulations (NPDWR) at least once every six years and if appropriate, revise them. The results of EPA’s first Six-Year-Review were released in 2003. This original review included 69 NPDWR’s including the TCR. Based upon the results of this review, EPA believed the TCR warranted revision. A panel of professionals assembled by the EPA called the TCR Distribution System Advisory Committee provided recommendations for revision and the final RTCR was published in the Federal Register on February 13, 2013.

Notable Changes
The RTCR aims for a “find and fix” approach that wasn’t present in earlier bacteriological rules. That being said as a whole the RTCR does not differ wildly from its predecessor the TCR, however, there are some notable changes. Most markedly are the newly required level 1 and level 2 assessments, sanitary defects, required corrective actions, violation revisions and seasonal start up procedures. In this article we will visit each of these notable changes in specific detail.

-Assessments Level 1 and Level 2: The most significant change between the TCR and the RTCR are the required Level 1 and Level 2 Assessments. The RTCR requires assessments when monitoring results indicated a PWSS may be vulnerable to contamination. Level 1 Assessments are conducted by the PWSS but Level 2 Assessments will be conducted by KDHE or state assigned third party. These assessments must be conducted within 30 days of being notified by the state.

-Level 1 Assessments: If a PWSS that is required to take >forty samples in a month or state assigned time frame has >five percent of samples result in a Total Coliform positive, a Level 1 Assessment is required. If a PWSS that is required to take <forty samples in a month or state assigned time frame has two or more Total Coliform positive samples, a Level 1 Assessment is required. Lastly, if a PWSS fails to take every required repeat sample after a Total Coliform positive sample, a Level 1 Assessment is required.

-Level 2 Assessments: If during a rolling twelve month time frame a PWSS triggers two or more Level 1 Assessments, a Level 2 assessment will be required. If a PWSS incurs an E. Coli maximum contaminant level (MCL) violation, a Level 2 assessment will be required. Level 2 Assessments will be a more thorough assessment of the PWSS conducted by KDHE or a state assigned third party.

-Sanitary Defects: Sanitary defects are defined as “defects that could either provide pathways that allow fecal contamination and/or waterborne pathogens to enter into the distribution system, or could indicate a failure or imminent failure in a barrier that is already in place...” These Sanitary Defects are not entirely unlike Sanitary Deficiencies and the two may overlap in some instances. Although the definition of a Sanitary Defect is defined in regulation, the Sanitary Defects themselves will be state discretion. Sanitary Defects will be identified during the Assessment process.

-Corrective Actions: When Sanitary Defects are identified during a Level 1 or Level 2 Assessment a PWSS has 30 days or a state assigned timeframe to complete a Corrective Action for that Sanitary Defect. Failure to do so will result in a Treatment Technique violation.

-Violations: The violations under the RTCR have changed fairly substantially. Newly established under the RTCR is an E. Coli MCL violation. E. Coli MCL violations occur with any of the following sample result combinations.
If a routine sample is and a repeat sample is

<table>
<thead>
<tr>
<th>If a routine sample is</th>
<th>and</th>
<th>a repeat sample is</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC+</td>
<td></td>
<td>EC+</td>
</tr>
<tr>
<td>EC+</td>
<td></td>
<td>TC+</td>
</tr>
<tr>
<td>EC+</td>
<td></td>
<td>EC+</td>
</tr>
<tr>
<td>EC+</td>
<td></td>
<td>missing (any repeat sample)</td>
</tr>
<tr>
<td>TC+</td>
<td></td>
<td>TC+ result, but no E. coli analysis</td>
</tr>
</tbody>
</table>

If a PWSS incurs an E. Coli MCL violation they must notify the state within 24 hours of learning of the result and complete a Level 2 assessment within 30 days. E. Coli MCL violations are a Tier 1 violation which requires public notice within 24 hours.

In addition to the E. Coli MCL violation, the RTCR also establishes Treatment Technique violations. A Treatment Technique violation can occur two ways. A Treatment Technique violation will be assessed if a PWSS fails to conduct a required assessment within 30 days of notification of the PWSS exceeding the trigger or in accordance with a state derived schedule. A Treatment Technique violation will also be assessed if a system fails to correct any sanitary defect found through either a Level 1 or Level 2 assessment within 30 days or in accordance with a state derived schedule. Treatment Technique violations are a Tier 2 violation requiring public notice within 30 days of notification of the violation.

Monitoring and Reporting violations are just that, failure to Monitor or Report results within the timeframe required. Monitoring and Reporting violations are both Tier 3 violations that require public notice within 1 year of being notified of the violation.

<table>
<thead>
<tr>
<th>Violation</th>
<th>Tier of Public Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E. Coli MCL Violation</strong></td>
<td>Tier 1 Notify Public Within 24 Hours</td>
</tr>
<tr>
<td>Treatment Technique Violation</td>
<td>Tier 2 Notify Public Within 30 Days</td>
</tr>
<tr>
<td>RTCR Monitoring Violation</td>
<td>Tier 3 Notify Public Within 365 Days</td>
</tr>
<tr>
<td>Reporting Violation</td>
<td>Tier 3 Notify Public Within 365 Days</td>
</tr>
</tbody>
</table>
-Seasonal Start-Up Procedures: Seasonal PWSS are defined in the RTCR as a non-community water system that is not operated as a PWS on a year-round basis and starts up and shuts down at the beginning and end of each operating season but final determinations of seasonal system status, is determined by the state. PWSS determined to be seasonal must conduct required, state-approved, start-up procedures before serving water to the public. Some examples of required start-up procedures include: Disinfection and flushing, sampling for Total coliform/E. Coli and verification that any current or historical sanitary defects from previous operational periods have been corrected. Required seasonal start-up procedures will need to be completed using the Public Water Supply System Data Collector.

Drinking Water Microbiological Sample Collection Procedures for Users of the KDHE Environmental Laboratory

Please follow the collection procedure as closely as possible – improper collection could contaminate an otherwise clean water sample.

1. Take samples from rigid faucets. **Do not collect from:** water softeners, charcoal filters, yard hydrants, fire hydrants, frost-free hydrants, leaking faucets, hot water faucets or sill cocks. Try to avoid swivel faucets or single handle faucets whenever possible.
2. Remove any aerators or filters attached to the end of the faucet.
3. Run the cold water at a steady rate for 3-5 minutes before sampling. During this time, wash your hands or use an appropriate hand sanitizer.
4. Open the lid of the sample bottle. Holding the lid in your free hand, fill the bottle between the 100ml line and the 120ml line, without letting the water splash out or overflow. Replace the lid, tightening securely. (There may be a small amount of liquid or dried preservative in the sample bottle. Leave this in the sample bottle, **DO NOT RINSE OUT**).
5. Apply one barcode sticker vertically to a sample bottle. Complete the sample submission form information, making sure the barcode numbers on the sample card and the sample bottle are the same. Print the collection information neatly with blue or black pen (**NOT PENCIL**). Include the chlorine residual reading at the location sampled and whether Free or Total (combined) chlorine. All date, time (24 hour clock) and location information must be filled in to be a valid sample.
6. Mail or send to: Kansas Health and Environment Laboratory, Environmental Microbiology Laboratory, 6810 SE Dwight St., Topeka, KS 66620. For questions, please refer to the Frequently Asked Questions (FAQ) on the KDHE Laboratory website, then call 785.296.0971 or 785.296.5518 if you have further questions. **Please DO NOT mail samples on Thursday or Friday.**

Coliform Sampling Site Plan

Guidance for developing a Coliform Sampling Site Plan for your Public Water Supply (PWS) System. **Note:** Even if the water supply is purchased from another Public Water Supply system, PWS systems with more than one independent distribution system serving 10 service connections or 25 or more individuals daily must sample each distribution system two or more times a month depending upon the population and source type of each distribution system. Representative sampling sites must be located on each distribution system.

**Sampling Site Plan for Bacteriological Samples**

(for systems which have more than one service connection)

K.A.R. 28-15a-21, adopting 40 CFR 141.21(a) by reference, requires total coliform samples to be collected “at sites which are representative of water throughout the distribution system according to a written sample siting plan. These plans are subject to State review and revision.” Below is a recommended way to develop a writing sampling plan in order to assure coverage of the system.

1. Prepare a map of the distribution system.
2. Divide the map into the same number of zones that there are bacteriological samples required each month (e.g. Two routine samples a month requires two zones to be sampled).
3. Select five sampling locations (sites) for collecting the samples in each zone. The sites chosen should be representative of the service connections in that area. There should also be sites available to collect repeat samples upstream and downstream of the routine sample site.
4. Prepare a list of all the sampling locations including zone and address. Each year, five different sampling locations should be chosen in each zone if possible.
5. For routine sampling each month, rotate through the sampling sites and collect one sample in each zone.
6. **Failure to prepare and follow a written sample-siting plan is a violation of K.A.R. 28-15a-21 and can result in a requirement to issue public notification.**
7. Site plans should be available for review by January 31 each year.

If there are questions, please call the Kansas Department of Health and Environment in Topeka at 785.296.5518 or the KDHE district office closest to your location.

- Northeast District – Lawrence 785.842.4600
- North Central District – Salina 785.827.9639
- Northwest District – Hays 785.625.5664
- Southeast District – Chanute 620.431.2390
- South Central District – Wichita 316.337.6020
- Southwest District – Dodge City 620.225.0596

### Additional Operator Information

**Check the KDHE Website:**
- Certified Operator Database (including change of address or employment information)
- Water and Wastewater Operator Need to Know
- Water and Wastewater Operator Exam Applications
- Operator, Education, Training and Experience Requirements
- Operator Certification, Requirements for Water and Wastewater Treatment Facilities
- Contract Operator Guidelines
- Contract Operator Form
- Training Approval Guidelines
- Reciprocity Form
- Water and Wastewater Operator Regulations
- Affidavit of Military Service
- Security Information
- Operator Database Instructions

Check out other KDHE information at [www.kdheks.gov](http://www.kdheks.gov)

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**For questions about the operator certification program, contact:**
Teresa Schuyler: 785.296.5511
tschuyle@kdheks.gov

Vickie Wessel: 785.296.2976
vjwessel@kdheks.gov
Fax: 785.296.0086

or
Teresa Schuyler
KDHE-BOW
1000 SW Jackson St. Suite 420
Topeka, KS 66612-1367

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The only thing worse than training people and having them leave is not training them and having them stay.