



2016 BACKFLOW PREVENTION EDUCATION COUNCIL OF COLORADO REGULATION SEMINAR SURVEY PANEL QUESTIONS

NOVEMBER 22, 2016

JEFFERSON COUNTY FAIRGROUNDS

COLORADO RURAL WATER, PUEBLO, CO

UTE WATER CONSERVATION DISTRICT, GRAND JUNCTION, CO

CITY OF DURANGO REC CENTER, DURANGO, CO

EAGLE RIVER WATER, VAIL, CO

BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL SURVEY EXPECTATIONS

- PANEL DISCUSSION - NON-SINGLE FAMILY SERVICE CONNECTIONS VS. INTERNAL WATER SUPPLY
- SURVEY STRATEGIES
- SURVEY QUALIFICATIONS
- SURVEY RESULTS AND ACTIONS
- SURVEY CHALLENGES
- REGULATORY EXPECTATIONS

PANELIST

- DR. STU ASAY, IAPMO, SENIOR DIRECTOR OF RESEARCH PROGRAMS
- BRAD MCCLINTOCK, DENVER WATER, CROSS CONNECTION CONTROL SUPERVISOR
- DON REYES, DENVER WATER, CROSS-CONNECTION CONTROL FIELD OPERATION SUPERVISOR
- JORGE DELGADO, CDPHE, SENIOR FIELD ENGINEER AND BPCCC SPECIALIST



PANELIST



DR. STU ASAY, IAPMO, SENIOR DIRECTOR OF RESEARCH PROGRAMS

Dr. Stu Asay, PE is the Senior Director of Research Programs for IAPMO. Prior to joining IAPMO, he published *Drinking Water & Backflow Prevention* magazine for 22 years, served as the standards coordinator and executive director of the American Society of Sanitary Engineering. He is an IAPMO and ICC certified plumbing inspector, a backflow preventer tester for 33 years, and is a certified backflow prevention repairer, surveyor, fire sprinkler system backflow preventer tester, and program administrator.

He has degrees in civil and environmental engineering, and is a registered professional engineer in several states.



PANELIST



BRAD MCCLINTOCK, DENVER WATER, CROSS CONNECTION CONTROL SUPERVISOR

Mr. McClintock currently serves as the Cross Connection Control Supervisor for Administrative Operations at Denver Water. Mr. McClintock is responsible for managing the various business processes and tracking of over 50k sites within the Denver Water service area and 8 Master Meter Districts. Mr. McClintock has over 12 years' experience in the Water/Wastewater and Public Works industry and holds multiple State of Colorado, ASSE and ABPA Certifications. Brad has completed multiple NIMS/ICS Training courses and has participated in the stakeholder process for the current Regulation 11.39.

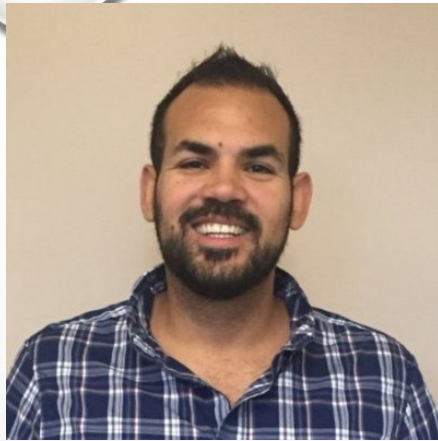


PANELIST



DON REYES, DENVER WATER, CROSS CONNECTION CONTROL FIELD OPERATION SUPERVISOR

Mr. Reyes is the Cross-Connection Field Operation Supervisor for Denver Water. Don has an extensive background in the Water Industry with 33 years of experience in Water Distribution, Plumbing, Heating, Mechanical and Backflow Prevention. Don serves as the Cross-Connection Control/Backflow Prevention liaison to industrial, commercial, residential customers and interdepartmental sections within Denver Water. In addition to an extensive background in the Water Industry, Don holds a State of Colorado Master and Journeyman plumbing license, American Backflow Prevention Association Tester and Cross-Connection Control Specialist Certifications. Don has completed multiple National Incident Management NIMS/ICS Training courses and served as a Stakeholder in the development of Colorado Primary Drinking Water Regulation 11.39.



PANELIST



JORGE DELGADO, PE, COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Mr. Delgado has served as CDPHE's Backflow Prevention and Cross-connection Control Specialist for ten years. Mr. Delgado currently is a Senior Field Engineer with CDPHE where his role allows him the opportunity to perform sanitary surveys at public water systems and compliance evaluation inspections at wastewater systems. Mr. Delgado currently serves as an Ex-Officio Member of the Colorado Plumbing Board. These roles allows Mr. Delgado further insight into the inner workings of BPCCC programs throughout the state. Mr. Delgado graduated with a Bachelors of Science Degree in Chemical Engineering from Colorado State University.

QUESTIONS

- WHAT IS AN APPROPRIATE SURVEY?
- DO ALL SURVEYS HAVE TO BE CONFIRMED WITH A SITE VISIT?
- CAN YOU USE WRITTEN QUESTIONNAIRES FOR SURVEYS?
- CAN YOU USE PHONE INTERVIEWS FOR SURVEYS?

QUESTIONS

- WHO IS QUALIFIED TO PERFORM A SURVEY?
- HOW CAN ONE GET QUALIFIED TO PERFORM SURVEYS?
- ARE THERE THIRD PARTY SURVEYORS?
- WHAT TYPE OF COMMON CROSS CONNECTIONS ARE IDENTIFIED DURING SURVEYS?

QUESTIONS

- WHAT IS YOUR STRATEGY WHEN PERFORMING A SURVEY? DO YOU START AT THE SERVICE CONNECTION OR A MECHANICAL ROOM?
- WHEN YOU DO A SURVEY DO YOU ONLY LOOK AT THE CONNECTION TYPE OR DO YOU DO AN INTERNAL BUILDING WATER SUPPLY SURVEY?
- WHEN IS AN INTERNAL BUILDING WATER SUPPLY SURVEY REQUIRED?

QUESTIONS

- IF A DISCOVERED CROSS CONNECTION IS CONTROLLED IN ACCORDANCE WITH THE LOCAL PLUMBING CODE HAVING JURISDICTION DOES THE SERVICE CONNECTION REQUIRE CONTROL?
- WHAT DO YOU DO IF A DISCOVERED CROSS CONNECTION POSES IMITATE RISK TO THE PUBLIC?
- HOW DO YOU DETERMINE IF A SERVICE CONNECTION IS A NON-SINGLE FAMILY SERVICE CONNECTION?

QUESTIONS

- HOW DO YOU WORK WITH YOUR BILLING AND BUILDING DEPARTMENTS TO ENSURE THAT YOUR INFORMATION IS CORRECT?
- HOW DO YOU SURVEY NEW SERVICE CONNECTIONS?
- WHAT ABOUT SINGLE FAMILY RURAL/AGRICULTURAL SERVICE CONNECTIONS?

QUESTIONS

- HOW DO YOU HANDLE DISCOVERED CROSS CONNECTIONS DOWN STREAM OF AN APPROPRIATELY CONTROLLED SERVICE CONNECTION?
- DO YOU ALLOW CONTAINMENT BY ISOLATION?
- WHEN YOU LOOK AT INTERNAL WATER SUPPLY WHAT TYPES OF CROSS CONNECTIONS ARE YOU LOOKING FOR?

QUESTIONS

- WHO IS SURVEYING THE WATER TREATMENT WORKS SUCH AS STORAGE TANKS, PUMP STATIONS, AND TREATMENT PLANTS?
- DO MULTI-FAMILY SERVICE CONNECTION COUNT AS NON-SINGLE FAMILY SERVICE CONNECTIONS?
- DO DUPLEXES COUNTS AS MULTI-FAMILY?

QUESTIONS

- I PERFORMED A SURVEY AND FOUND A BOILERS THAT DOES NOT INCLUDE CHEMICAL. IT IS PROTECTED WITH AN INTERMEDIATE ATMOSPHERIC VENT. IS THIS ADEQUATE?
- I PERFORMED A SURVEY AND DISCOVERED AND FIRE SUPPRESSION SYSTEM WITH ONLY A CHECK VALVE. IS THIS ADEQUATE?

QUESTIONS

- I PERFORMED A SURVEY AT A MULTI-FAMILY SERVICE CONNECTION. THE DOMESTIC LINE IS NOT PROTECTED, HOWEVER THE FIRE SUPPRESSION SYSTEM AND IRRIGATION SYSTEM ARE APPROPRIATELY CONTROLLED. THERE ARE NO OTHER CROSS CONNECTIONS ON SITE. IS THERE ANY OTHER ACTION REQUIRED?
- HOW DO YOU NOTIFY CUSTOMERS THAT A CROSS CONNECTION HAS BEEN DISCOVERED?
- HOW LONG BEFORE A SURVEY IS PERFORMED AND A CROSS CONNECTION IS DISCOVERED DO YOU ENSURE THAT CONTROL IS OBTAINED?

QUESTIONS

- WHAT GIVES YOU AUTHORITY TO PERFORM A SURVEY? HOW OFTEN IS THAT CHALLENGED AND IF SO HOW DO YOU ADDRESS IT?
- WHAT GIVES YOU AUTHORITY TO REQUIRE CONTROL? HOW OFTEN IS THAT CHALLENGED AND IF SO HOW DO YOU ADDRESS IT?

QUESTIONS

- HOW DO YOU ADDRESS INSTANCES WHERE A CUSTOMER DOES NOT ALLOW YOU TO PERFORM A SURVEY?
- I HAVE PERFORMED A SURVEY AND DISCOVERED NO CROSS CONNECTIONS. IS CONTROL REQUIRED?

QUESTIONS

- I AM A SMALL PUBLIC WATER SYSTEM WITH FIVE NON SINGLE FAMILY SERVICE CONNECTIONS WE OWN ALL THE BUILDINGS. DO I HAVE TO PERFORM AN INTERNAL WATER BUILDING SUPPLY SURVEY AND CONTROL INTERNAL X-CONS?
- I AM A SMALL PUBLIC WATER SYSTEM WITH FIVE NON SINGLE FAMILY SERVICE CONNECTIONS BUT WE ONLY OWN ONE OF THE BUILDINGS. DO I HAVE TO PERFORM AN INTERNAL WATER BUILDING SUPPLY SURVEY?

QUESTIONS

- WHAT RESOURCES ARE OUT THERE TO BE A BETTER SURVEYORS? PLUMBING CODES, TRAINING?
- ARE FIRE CONNECTIONS CONSIDERED CROSS CONNECTIONS?
- ARE STANDALONE YARD HYDRANTS CONSIDERED CROSS CONNECTIONS?

QUESTIONS

- I SUSPECTED THAT THERE ARE UNCONTROLLED CROSS CONNECTIONS IN MY SINGLE FAMILY RESIDENTIAL CONNECTIONS. WHAT ACTION IS REQUIRED?
- I KNOW THERE ARE UNCONTROLLED CROSS CONNECTIONS IN MY SINGLE FAMILY RESIDENTIAL CONNECTIONS. WHAT ACTION IS REQUIRED?

BONUS QUESTIONS

- HOW DO YOU DOCUMENT THE RESULTS OF A SURVEY?
- HOW MUCH TIME DOES ONE SURVEY TAKE?
- HAVE YOU PERFORMED A SURVEY AND FOUND SOMETHING SO EGREGIOUS THAT IMMEDIATE ACTION WAS REQUIRED?

BONUS QUESTIONS

- WHAT DO YOU DO IF YOU FIND AN UNCONTROLLED CROSS CONNECTION THAT IS NOT IN YOUR WATER SYSTEM?
- HOW MUCH WILL A SURVEYOR CHARGE PER SURVEY?

BONUS QUESTIONS

- DO CERTIFIED TESTERS FAIL INAPPROPRIATELY INSTALLED ASSEMBLIES?
- DOES ASSE OR ABPA TRAIN CERTIFIED TESTERS TO FAIL INAPPROPRIATELY INSTALLED ASSEMBLIES?
- DOES YOUR WATER SYSTEM REVIEW TEST REPORTS FOR COMMENTS NOTING IMPROPERLY INSTALLED ASSEMBLIES?

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OPEN SESSION QUESTIONS

PANELIST CONTACT INFORMATION

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