(C) For systems supplying a large proportion of non-English speaking consumers, as determined by the Department, the supplier must include one or more of the following:

(I) Information in the appropriate language(s) regarding the importance of the special public notice.

(II) A telephone number or address where the consumer may contact the supplier to obtain a translated copy of the special public notice or request assistance in the appropriate language.

(ii) The supplier must redistribute the special public notice annually until the significant deficiency is corrected.

(b) For non-community water systems with significant deficiencies that have been corrected, if required by the Department, the supplier must distribute special public notice to inform consumers of the significant deficiencies, how the deficiencies were corrected, and the dates of correction.

11.39 BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL RULE

11.39(1) Applicability and Definitions

(a) For all public water systems, the supplier must comply with the requirements specified in this rule beginning January 1, 2016.

(b) “ACTIVE DATE” means the first day that a backflow prevention assembly or backflow prevention method is used to control a cross connection in each calendar year.

(c) “BACKFLOW” means the reverse flow of water, fluid, or gas caused by back pressure or back siphonage.

(d) “BACKFLOW PREVENTION ASSEMBLY” means any mechanical assembly installed at a water service line or at a plumbing fixture to prevent a backflow contamination event, provided that the mechanical assembly is appropriate for the identified contaminant at the cross connection and is an in-line field-testable assembly.

(e) “BACKFLOW PREVENTION ASSEMBLY ANNUAL TESTING COMPLIANCE RATIO” means the number of backflow prevention assemblies tested during the calendar year divided by the number of backflow prevention assemblies installed at a cross connection that were used during the calendar year.

(f) “BACKFLOW PREVENTION METHOD” means any method and/or non-testable device installed at a water service line or at a plumbing fixture to prevent a backflow contamination event, provided that the method or non-testable device is appropriate for the identified contaminant at the cross connection.

(g) “BACKFLOW PREVENTION METHOD ANNUAL INSPECTION COMPLIANCE RATIO” means the number of backflow prevention methods inspected during the calendar year divided by the number of backflow prevention methods installed at a cross connection that were used during the calendar year.

(h) "CERTIFIED CROSS-CONNECTION CONTROL TECHNICIAN" means a person who possesses a valid Backflow Prevention Assembly Tester certification from one of the following approved organizations: American Society of Sanitary Engineering (ASSE) or the American Backflow Prevention Association (ABPA). If a certification has expired, the certification is invalid.

(i) "CONTROLLED" means having a properly installed, maintained, and tested or inspected backflow prevention assembly or backflow prevention method that prevents backflow through a cross connection.

(j) "SURVEY COMPLIANCE RATIO" means the total number of connections surveyed, including the number of all non-single-family-residential connections to the public water system with the most protective backflow prevention assembly or method that was not surveyed as specified in 11.39(3)(c), divided by the total number of non-single-family-residential connections to the public water system and connections within the supplier's waterworks.

(i) The supplier is not required to include any non-single-family-residential connections identified after October 31 of the calendar year in the total number of non-single-family-residential connections to the public water system until the following calendar year.

(k) "UNCONTROLLED" means not having a properly installed and maintained and tested or inspected backflow prevention assembly or backflow prevention method, or the backflow prevention assembly or backflow prevention method does not prevent backflow through a cross connection.

11.39(2) <u>Backflow Prevention and Cross-Connection Control Program Requirements</u>

(a) The supplier must develop a written backflow prevention and cross-connection control program. The written backflow prevention and cross-connection control program must include all of the following:

(i) The supplier's process for conducting surveys.

(ii) The supplier's legal authority to perform a survey of a customer's property to determine whether a cross connection is present unless the supplier controls all non-single-family-residential connections to the public water system with the most protective backflow prevention assembly or backflow prevention method.

(iii) The process the supplier will use to select a backflow prevention assembly or backflow prevention method to control a cross connection.

(iv) The supplier's legal authority to install, maintain, test, and inspect backflow prevention assemblies and/or backflow prevention methods and/or require customers to install, maintain, test, and inspect backflow prevention assemblies and/or backflow prevention methods.

(v) The process the supplier will use to track the installation, maintenance, testing, and inspection of all backflow prevention assemblies and backflow prevention methods used to control cross connections.

(vi) The process the supplier will use to ensure backflow prevention assemblies are tested by a Certified Cross-Connection Control Technician.

(b) The Department may review and revise the written backflow prevention and cross-connection control program.

11.39(3) Treatment Technique Requirements for the Control of Cross Connections

(a) If the supplier learns of a suspected or confirmed backflow contamination event, the supplier must notify and consult with the Department on any appropriate corrective measures no later than 24 hours after learning of the backflow contamination event.

(b) The supplier is prohibited from installing or permitting any uncontrolled cross connection to the distribution system or within the supplier's waterworks.

(c) The supplier must survey all non-single-family-residential connections to the public water system to determine if the connection is a cross connection unless the supplier controls that connection with the most protective backflow prevention assembly or backflow prevention method. The supplier must survey all connections within the supplier's waterworks to determine if the connection is a cross connection.

(i) If the supplier identifies a cross connection during a survey, the supplier must determine the type of backflow prevention assembly or backflow prevention method to control the cross connection.

(ii) If the supplier becomes aware of a single-family-residential connection to the public water system that is a cross connection, the supplier must determine the type of backflow prevention assembly or backflow prevention method to control the cross connection.

(iii) The supplier must achieve the survey compliance ratios as specified in Table 11.39-I.

TABLE 11.39-I Survey Compliance Ratio

Compliance Date	Compliance Ratio
By December 31, 2016	Greater than 0.60
By December 31, 2017	Greater than 0.70
By December 31, 2018	Greater than 0.80
By December 31, 2019	Greater than 0.90
By December 31, 2020 and each year after	1.0

(iv) The supplier may apply to the Department for alternative survey compliance ratios for the compliance dates from December 31, 2016 through December 31, 2019 specified in Table 11.39-I.

(A) In the application, the supplier must include all of the following information:

(I) An explanation of why the supplier is unable to comply with the survey compliance ratios specified in Table 11.39-I.

(II) The proposed alternative survey compliance ratios for the compliance dates from December 31, 2016 through December 31, 2019 specified in Table 11.39-I.

(a) The proposed alternative survey compliance ratios must meet the survey compliance ratio of 1.0 by December 31, 2020.

(III) A discussion of the supplier's strategy to achieve the proposed alternative survey compliance ratios and the survey compliance ratio of 1.0 by December 31, 2020.

(B) The Department will only grant alternative compliance ratios for the compliance dates from December 31, 2016 through December 31, 2019.

(C) If the supplier receives written Department-approval for alternative survey compliance ratios, the supplier must comply with any Department-specified requirements in the approval.

(d) If the supplier discovers an uncontrolled cross connection and a suspected or confirmed backflow contamination event has not occurred, the supplier must:

(i) No later than 120 days after its discovery, install and maintain or require the customer to install and maintain a backflow prevention assembly or backflow prevention method at the uncontrolled cross connection, suspend service to the customer, or remove the cross connection.

(A) If the supplier is unable to meet the 120-day deadline, the supplier must consult with the Department and the Department may approve an alternative schedule.

(B) The supplier can either control cross connections discovered within a customer's water system by containment or containment by isolation.

(I) "CONTAINMENT" means the installation of a backflow prevention assembly or a backflow prevention method at any connection to the public water system that supplies an auxiliary water system, location, facility, or area such that backflow from a cross connection into the public water system is prevented.

(II) "CONTAINMENT BY ISOLATION" means the installation of backflow prevention assemblies or backflow prevention methods at all cross connections identified within a customer's water system such that backflow from a cross connection into the public water system is prevented.

(C) The supplier must ensure that all installed backflow prevention assemblies used to control cross connections are tested by a Certified Cross-Connection Control Technician upon installation.

(D) The supplier must ensure that all installed backflow prevention methods used to control cross connections are inspected by the supplier or a Certified Cross-Connection Control Technician upon installation.

(e) The supplier must ensure that backflow prevention assemblies used to control cross connections are tested annually by a Certified Cross-Connection Control Technician and maintained. The supplier must achieve the backflow prevention assembly annual testing compliance ratios as specified in Table 11.39-II.

TABLE 11.39-II Backflow Prevention Assembly Annual Testing Compliance Ratio	
Compliance Date	Annual Compliance Ratio
By December 31, 2016	Greater than 0.50
By December 31, 2017	Greater than 0.60
By December 31, 2018	Greater than 0.70
By December 31, 2019	Greater than 0.80
By December 31, 2020 and each year after	Greater than 0.90

(i) No later than 60 days after the supplier is notified of a failed test, the supplier must ensure that the backflow prevention assembly that produced the failed test is repaired or replaced and tested, service is suspended to the customer, or the cross connection is removed.

(A) If the supplier is unable to meet the 60-day deadline, the supplier must consult with the Department and the Department may approve an alternative schedule.

(ii) Beginning January 1, 2021, for each backflow prevention assembly not tested during the previous calendar year, the supplier must ensure the backflow prevention assembly is tested no later than 90 days after the active date of the backflow prevention assembly in the following calendar year.

(A) If the supplier is unable to meet the 90-day deadline, the supplier must consult with the Department and the Department may approve an alternative schedule.

(f) The supplier must ensure that backflow prevention methods used to control cross connections are inspected annually by the supplier or a Certified Cross-Connection Control Technician and maintained. The supplier must achieve a backflow prevention method annual inspection compliance ratio of greater than (>) 0.90.

(i) No later than 60 days after the supplier is notified of an inadequate backflow prevention method, the supplier must ensure that the inadequate backflow prevention method is repaired or replaced, service is suspended to the customer, or the cross connection is removed.

(A) If the supplier is unable to meet the 60-day deadline, the supplier must consult with the Department and the Department may approve an alternative schedule.

(ii) Beginning January 1, 2017, for each backflow prevention method not inspected during the previous calendar year, the supplier must ensure the backflow prevention method is inspected no later than 90 days after the active date of the backflow prevention method in the following calendar year.

(A) If the supplier is unable to meet the 90-day deadline, the supplier must consult with the Department and the Department may approve an alternative schedule.

(g) The supplier must control or remove any uncontrolled cross connection or ensure that any cross connection is controlled no later than 10 days after being ordered in writing by the Department.

11.39(4) Backflow Prevention and Cross-Connection Control Program Annual Written Report

(a) Beginning in 2017, the supplier must develop a written backflow prevention and cross-connection control program report for the previous calendar year that includes all of the following information:

(i) Total number of non-single-family-residential connections to the public water system and connections within the supplier's waterworks.

(A) The supplier is not required to include any non-single-family-residential connections identified after October 31 of the calendar year in the total number of non-single-family-residential connections to the public water system until the following calendar year.

(ii) Total number of connections surveyed to determine if cross connections are present.

(iii) Survey compliance ratio.

(iv) Total number of identified cross connections.

(v) Number of uncontrolled cross connections identified during the calendar year.

(A) Number of identified uncontrolled cross connections that were controlled within 120 days of discovery.

(B) Number of identified uncontrolled cross connections that were not controlled within 120 days of discovery.

(vi) Number of backflow prevention assemblies installed at cross connections that were used during the calendar year.

(vii) Number of backflow prevention methods installed at cross connections that were used during the calendar year.

(viii) Number of connections where service was suspended as specified in 11.39(3) during the calendar year.

(ix) Number of backflow prevention assemblies used to control cross connections that were tested by a Certified Cross Connection Control Technician during the calendar year.

(x) Backflow prevention assembly annual testing compliance ratio.

(xi) Beginning January 1, 2021, the number and location of backflow prevention assemblies not tested during the calendar year covered by the report.

(xii) Number of backflow prevention methods used to control cross connections that were inspected during the calendar year.

(xiii) Backflow prevention method annual inspection compliance ratio.

(xiv) Beginning January 1, 2017, the number and location of backflow prevention methods not inspected during the calendar year covered by the report.

(b) For each calendar year, the supplier must complete the annual backflow prevention and cross-connection control program report no later than May 1 of the following calendar year.

11.39(5) Compliance Determinations for Backflow Prevention and Cross-Connection Control

(a) Compliance with the survey treatment technique requirement is based on the survey compliance ratio.

(i) The supplier is not required to include any non-single-family-residential connections identified after October 31 of the calendar year in the total number of non-single-family-residential connections to the public water system until the following calendar year.

(b) Compliance with the backflow prevention assembly testing treatment technique requirement is based on the backflow prevention assembly annual testing compliance ratio.

(c) Compliance with the backflow prevention method inspection treatment technique requirement is based on the backflow prevention method annual inspection compliance ratio.

11.39(6) Violations for Backflow Prevention and Cross-Connection Control

(a) The following constitute backflow prevention and cross-connection control treatment technique violations:

(i) The supplier fails to notify the Department of any suspected or confirmed backflow contamination event as specified in 11.39(3)(a).

(ii) The supplier installs or permits an uncontrolled cross connection.

(iii) The supplier fails to achieve the survey compliance ratio specified in 11.39(3)(c) or the Department-approved alternative survey compliance ratios.

(iv) The supplier discovers an uncontrolled cross connection and fails to comply with the requirements specified in 11.39(3)(d).

(v) The supplier fails to achieve the annual backflow prevention assembly testing compliance ratio specified in 11.39(3)(e).

(vi) The supplier fails to comply with the backflow prevention assembly failed test requirements specified in 11.39(3)(e)(i).

(vii) The supplier fails to comply with the backflow prevention assembly testing requirements specified in 11.39(3)(e)(ii).

(viii) The supplier fails to achieve the backflow prevention method inspection compliance ratio specified in 11.39(3)(f).

(ix) The supplier fails to comply with the backflow prevention method inadequate method requirements specified in 11.39(3)(f)(i).

(x) The supplier fails to comply with the backflow prevention method inspection requirements specified in 11.39(3)(f)(ii).

(xi) The supplier fails to comply with a written order from the Department specified in 11.39(3)(g).

(b) The following constitute backflow prevention and cross-connection control violations:

(i) The supplier fails to develop or implement a written backflow prevention and cross-connection control program as specified in 11.39(2).

(ii) The supplier fails to complete an annual backflow prevention and cross-connection control program report as specified in 11.39(4).

11.39(7) Response to Violations for Backflow Prevention and Cross-Connection Control

(a) In the event of a backflow prevention and cross-connection control treatment technique violation, the supplier must:

(i) Notify the Department no later than 48 hours after the violation occurs.

(ii) Distribute Tier 2 public notice as specified in 11.33.

(b) In the event of a backflow prevention and cross-connection control violation, the supplier must:

(i) Notify the Department no later than 48 hours after the violation occurs.

(ii) Distribute Tier 3 public notice as specified in 11.33.

11.40 RESERVED

11.41 WATER HAULER RULE

11.41(1) Applicability and Definitions

(a) For a public water system that hauls water, the water hauler must comply with the requirements specified in this rule in addition to other applicable requirements of the *Colorado Primary Drinking Water Regulations*.

(b) The water hauler is a supplier and means any person that owns or operates a public water system that hauls water.

11.41(2) Treatment Technique and Monitoring Requirements for Public Water Systems That Haul Water

(a) The water hauler must operate in accordance with a Department-approved operational plan.

(i) The water hauler must either submit an operational plan for Department approval or use the pre-approved operational plan in the Department's *Operational Handbook for a Colorado Public Water System That Hauls Water*.

(b) In addition to the applicable residual disinfectant concentration monitoring requirements specified in 11.8, 11.11 and 11.23, on each day a tank or container is used to deliver water, the water hauler must monitor the residual disinfectant concentration of the water dispensed from each tank or container at least once.