



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Certification of Inspection & Testing Results –

Initial & Quarterly Physical Connection Test & Maintenance Report

1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
☐	☐	☐	☐
01/01-03/31	04/01-06/30	07/01-09/30	10/01-12/31

Instructions: Per N.J.S.A. 58:11-9.4 complete this form and submit after initial inspection & testing of each; new service connection install, newly permitted existing, modified, or replacement, backflow prevention device for approved physical connection installation. Mail form to the Supplier of Water and Administrative Authority (CEHA designee having local health board jurisdiction) within 5 days of each test and inspection performed by a Certified Tester. Forms shall be kept at facility, exhibited upon request, and as applicable per N.J.A.C. 7:10-10.5 through 10.7 et seq emailed with a Physical Connection Initial/New, Modification or Renewal Application to: physicalconnection@dep.nj.gov.

Backflow Prevention Device Test Date ____/____/____
Test Kit Calibration Date ____/____/____

To: physicalconnection@dep.nj.gov
Mail Code 401-03
NJ DEP, Division of Water Supply & Geoscience
Bureau of Water System Engineering
PO Box 420
Trenton, NJ 08625-0420

From: (Physical Connection Permittee/Applicant Name)

The backflow prevention device identified below has been tested and inspected as required by N.J.A.C. 7:10-10.6 with results in compliance with N.J.A.C. 7:10-10 et seq. according to the undersigned certified backflow prevention device tester.

Description of Device Tested

Location of Device

Manufacturer: _____ ☐ RPZ ☐ DCVA
Model Number: _____ Size: _____ in.

Serial Number (SN): _____

☐ New Service Connection Device Install
☐ Modified Permitted Existing Device

☐ Newly Permitted Existing Device

☐ Replacement of Permitted Existing Device **Old SN:** _____

Comments and Notations: _____

	PRESSURE TEST			INTERNAL INSPECTION		
	REDUCED PRESSURE ZONE ASSEMBLY (RPZ)			RPZ		
	DOUBLE CHECK VALVE ASSEMBLY (DCVA)			DCVA		
	1 st Check	2 nd Check	Relief Valve	1 st Check	2 nd Check	Relief Valve
Initial Test	Closed Tight at _____ PSID	Closed Tight at _____ PSID	Opened _____ PSID	OK	OK	OK
Passed Date ____/____/____						
Failed Date ____/____/____	No.2 Shut-off Valve Closed Tight Leaked (test invalidated) No.2 Shut-off Repaired ____/____/____			Failed	Failed	Failed
Repairs & Materials Used						
(Repair or Replace) Re-Test Date ____/____/____ <30 Days After Initial Failure	Closed Tight at _____ PSID	Closed Tight at _____ PSID	Opened _____ PSID	OK	OK	OK

Certification of Inspection & Testing Results – Initial & Quarterly Physical Connection Testing & Monitoring Report

[Must be completed by the Certified Backflow Prevention Device Tester per N.J.A.C. 7:10-10 et seq and according to testing instructions on this Form BWSE-CITR-IQ (08-2022) as amended and authorized by N.J.S.A. 58:11-9.4]

I hereby certify that on ____/____/____ the Backflow Prevention Device listed on this form was functioning satisfactorily at the time of the test.

Name of Firm: _____

Address : _____

Certified Tester Name: _____

Certified Tester Email: _____

Certified Tester Phone Number: _____

Certified Tester Signature: _____

Date: ____/____/____

Tester Certifying Agency: _____

Certified Tester ID #: _____

Exp.Date: ____/____/____

Backflow Prevention Device Assemblies – PRETEST SET UP & TEST PROCEDURES **(N.J.A.C. 7:10-10.6 et seq amended/supplemented by authorization of N.J.S.A. 58:11-9.4)**

(The following RPZ & DCVA PRETEST SET UP AND TEST PROCEDURES are intended as a quick field reference guide and are not a comprehensive substitute for the regulations or curriculum materials from New Jersey approved Backflow Tester Certifying Agencies.)

PRETEST SET UP for both RPZ & DCVA Backflow Assemblies and Test Kit

1. Notify and obtain Facility Owner/Permittee permission for backflow prevention device test and temporary water service interruption.

2. Identify device: manufacturer, type, size, model and serial number as well as flow direction and upstream/downstream shut-offs and number sequence of test cocks as well as confirming that test cock adapters are installed.

3. Verify that upstream shut-off valve No. 1 is open, and there is water pressure. With permission close downstream shut-off valve No. 2.

Note for Reduced Pressure Zone Assemblies: A discharge from the RPZ relief valve port indicates a leaking No. 1 check valve, which means test failure and **requires repair of No. 1 check valve before remainder of RPZ testing can continue.** If there is no discharge No. 1 check valve can be assumed to be holding **tight** which is the **initial RPZ testing parameter.** The RPZ testing parameters (t5TT21) are:

t5 – first check valve holds tight when no RPZ relief valve port discharge at minimum differential pressure of 5 PSID

T – second check valve holds Tight when no RPZ relief valve port discharge and differential pressure gauge steady against backpressure

T – downstream shut-off valve No. 2 Tightness confirms no-flow (no-leak) condition to validate device valve differential pressure readings

2 – relief valve opens at minimum differential pressure of 2 PSID below inlet supply pressure

1 – second check valve differential pressure steady at minimum of 1 PSID.

4. Flush test cocks in this order #4, #3, #2, & #1 all remaining open with small flow, then after all air is bled close test cocks in this order #1, #2, #3 & #4. This order prevents premature RPZ relief valve opening before the test, and this order is also acceptable for DCVA test cocks flush.

Note for Double Check Valve Assemblies: BACKPRESSURE EVALUATION - Confirm backpressure does not exist with a standard PSI calibrated gauge to verify pressure at test cock #1 is higher than test cock #4. **Device cannot be tested if backpressure condition exists from leaking downstream shut-off valve No. 2 which must be reclosed and/or repaired, or replaced with a new shut-off valve No. 2, or another shut-off valve further downstream is successfully closed to establish no-flow condition before the device can be fully tested.** The DCVA testing parameters (11T) are:

1 – first check valve must have minimum static differential pressure of 1 PSID

1 – second check valve must have minimum static differential pressure of 1 PSID, but even if static differential pressure is 0 PSID device should be tested for backpressure since 0 PSID may indicate downstream shut-off valve is leaking and device is in backflow condition

T – Tightness validation test for no-flow conditions (if necessary see above Note for Double Check Valve Assemblies to evaluate and eliminate backpressure to establish no-flow conditions).

5. Close Test Kit high control valve (A) and low control valve (B), leave vent control valve (C) open.

PRETEST SET UP for both RPZ & DCVA Backflow Assemblies and Test Kit on preceding Page 3 of 5 are essential for proper execution of the following RPZ and DCVA TEST PROCEDURES.

Reduced Pressure Zone Assembly (RPZ)
TEST PROCEDURES

- A) **First check valve tightness at 5 PSID minimum differential pressure test:**
1. Follow above **PRETEST SET UP 3. Note for Reduced Pressure Zone Assemblies** to confirm tightness t.
 2. Connect Test Kit high-pressure hose to test cock #2.
 3. Connect Test Kit low-pressure hose to test cock #3.
 4. Open test cocks #2 & #3.
 5. Open Test Kit high valve (A) and bleed air out vent hose.
 6. Close high valve (A).
 7. Open Test Kit low valve (B) and bleed air out vent hose.
 8. Close low valve (B) **Slowly**.
 9. Observe stable differential pressure on gauge and record on test form. (Must be 5 PSID Minimum)
 10. Leave Test Kit in place with high valve (A) and low valve (B) closed and vent control valve remaining open.
- B) **Second check valve Tightness against backpressure test:**
1. Elevate and bleed Test Kit vent hose by opening low valve (B) to fill vent hose with water then close low valve (B).
 2. Connect water filled vent hose to test cock #4.
 3. Open test cock #4.
 4. Open Test Kit high valve (A) **Slowly**.
 5. Observe gauge and record on test form. If a slight differential pressure drop occurs **but then holds steady, second check valve is Tight**. Close test cock #4 and conduct **(no-flow) test C) below**.
 6. If pressure continues drop and RPZ relief port discharges, then second check is recorded as leaking so (no-flow) test C) below cannot be performed. However, RPZ relief valve with **failed leaking second check can and should be tested**. Close test cock #4 and skip to D) RPZ relief valve opening differential pressure test below.
- C) **Downstream shut-off valve No. 2 Tightness (no-flow) test and differential pressure validation:**
1. Close test cock #2.
 2. Observe gauge, if reading steady, the downstream shut-off valve No. 2 is Tight. But if differential gauge drops to zero, flow condition exists, and the downstream shut-off valve No. 2 is recorded as leaking which makes **TEST PROCEDURES A) on the First and B) on the Second check valves invalid** and they must be recorded as such. For solutions to **leaking** see above **PRETEST SET UP 4. Note for Double Check Valve Assemblies**.
- D) **RPZ relief valve opening differential pressure test:**
Relief valve must open at a minimum of 2 PSID below inlet.
1. Open test cock #2, Test Kit high valve (A) shall remain open and close Test Kit vent valve (C).
 2. **Slowly** open the Test Kit low valve (B) until the differential pressure begins to fall **Slowly**.
 3. Observe relief valve port for first discharge of water and record the pressure differential on the gauge at this point on the form.
- E) **Second check valve 1 PSID minimum differential pressure test:**
1. Connect Test Kit high hose (A) to test cock #3 and Test Kit low hose (B) to test cock #4.
 2. Open test cocks #3 and #4 and bleed from Test Kit high and low.
 3. Record second check differential pressure which must be minimum of 1 PSID. If 0 PSID, downstream shut-off valve No. 2 may be leaking causing backpressure. Evaluate for backpressure.

Double Check Valve Assembly (DCVA)
TEST PROCEDURES

- A) **First check valve 1 PSID minimum differential pressure test:**
1. Connect Test Kit high-pressure hose to test cock #2.
 2. Connect Test Kit low-pressure hose to test cock #3.
 3. Open test cocks #2 & #3.
 4. Open Test Kit high valve (A) and bleed air out vent hose.
 5. Close high valve (A).
 6. Open Test Kit low valve (B) and bleed air out vent hose.
 7. Close low valve (B) **Slowly**.
 8. Observe stable differential pressure on gauge and record on test form. (Must be 1 PSID Minimum)
 9. Close test cocks #2 & #3, then disconnect hoses.
- B) **Second check valve 1 PSID minimum static differential pressure test:**
1. Close Test Kit high control valve (A) and low control valve (B), leave vent control valve (C) open.
 2. Connect high-pressure hose to test cock #3.
 3. Connect low-pressure hose to test cock #4.
 4. Open test cocks #3 & #4.
 5. Open Test Kit high valve (A) and bleed air out vent hose.
 6. Close high valve (A).
 7. Open Test Kit low valve (B) and bleed air out vent hose.
 8. Close low valve (B) **Slowly**.
 9. Observe stable differential pressure on gauge and record on test form. (Must be 1 PSID Minimum)
 10. Close test cocks #3 & #4, then disconnect hoses.
- C) **Downstream shut-off valve No. 2 Tightness (no-flow) test and differential pressure validation:**
1. Repeat **First check valve** test procedures A)1.-A)6 above.
 2. Elevate and bleed Test Kit vent hose, then connect to test cock #4.
 3. Open test cock #4.
 4. Open Test Kit high valve (A) **Slowly**.
 5. Close test cock #2.
 6. Observe gauge, if reading steady, the downstream shut-off valve No. 2 is Tight. But if differential gauge drops to zero, flow condition exists, and the downstream shut-off valve No. 2 is recorded as leaking which makes **TEST PROCEDURES A) on the First and B) on the Second check valves invalid** and they must be recorded as such. For solutions to **leaking** see above **PRETEST SET UP 4. Note for Double Check Valve Assemblies**.

POST-TEST PROCEDURES: Prior to Test Kit equipment removal close all test cocks, slowly and fully open downstream shut-off valve No. 2 restoring water service, then complete all test data reporting per N.J.A.C. 7:10-10 et seq.

Certification of Inspection and Testing Results

[Must be completed ONLY when witnessing is specifically required under N.J.A.C. 7:10-10.6(b)2 by Supplier of Water a.k.a. Community Water System, Administrative Authority (CEHA designee having local health board jurisdiction), or NJDEP Bureau of Water System Engineering per N.J.A.C. 7:10-10 et seq and according to testing instructions on this Form BWSE-CITR-IQ (08-2022) as amended and authorized by N.J.S.A. 58:11-9.4]

Otherwise ONLY TESTER CERTIFICATION on page 2 is required.

Certification by Supplier of Water:

On_____/_____/_____ The Supplier of Water for the facility named on this form hereby recommends that the Physical Connection Permit be issued for One Year and Certifies that; through witnessing of the Pressure Tests performed by a Certified Tester that: The Backflow Prevention Device was functioning satisfactorily at the time of the test.

Name and PWSID of the Supplier of Water _____

Name: _____

Email: _____

Signature: _____

Certification by Administrative Authority (CEHA designee having local health board jurisdiction):

On_____/_____/_____ The Administrative Authority (CEHA designee having local health board jurisdiction) for the Physical Connection Permittee/Applicant identified on page 1 of this form hereby recommends that the Physical Connection Permit be issued for One Year and Certifies that; through witnessing of the Pressure Tests performed by a Certified Tester that: The Backflow Prevention Device was functioning satisfactorily at the time of the test.

Name of Administrative Authority _____
(CEHA designee having local health board jurisdiction)

Name: _____

Email: _____

Signature: _____

The Department of Environmental Protection, Division of Water Supply & Geoscience, Bureau of Water System Engineering hereby certifies that through a site inspection and witnessing of a pressure test the Backflow Prevention Device was functioning satisfactorily at the time of the test and that the Approved Physical Connection Installation was in Compliance with the Rules at N.J.A.C. 7:10-10.1 et. seq and hereby recommends approval.

Name: _____

Email: _____

Signature: _____