



**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER SYSTEM ENGINEERING
TECHNICAL REVIEW FORM**

**FILTRATION
(N.J.A.C. 7:10-11.14)**

Water Purveyor

PWSID#

Municipality

Type of Media: _____

Filter Loading Rate: _____

Effective Size of Media: _____

Filter Media Thickness: _____

Uniformity Coefficient: _____

Maximum Head Loss Through Media: _____

Surface Contact Area:

Individual _____

Combined _____

	YES	NO	N/A
1. Are gravity or membrane filters provided for surface water treatment plants? (N.J.A.C. 7:10-11.8(d)3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. For surface water, are online continuous turbidity monitoring devices provided which will analyze and record the effluent turbidity at certain intervals? (N.J.A.C. 7:10-11.14(a)3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are the filters protected from sanitary hazards? (N.J.A.C. 7:10-11.14(c)1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. No common walls between treated and untreated water? (N.J.A.C. 7:10-11.14(c)1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. No cross connections between treated and untreated water? (N.J.A.C. 7:10-11.14(c)1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are pressure filters designed so that the loading rate does not exceed 3 gallons per minute per square foot with one filter out of service? (N.J.A.C. 7:10-11.14(c)2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are gravity filters designed so that the loading rate does not exceed 5 gallons per minute per square foot with one filter out of service? (N.J.A.C. 7:10-11.14(c)4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO	N/A
8. Is the effective size no greater than 0.55 mm for rounded particles? (N.J.A.C. 7:10-11.14(c)5i)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the effective size no greater than 0.45 mm for angular particles? (N.J.A.C. 7:10-11.14(c)5ii)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Is the uniformity coefficient no greater than 1.6?(N.J.A.C. 7:10-11.14(c)5iii)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Is the thickness of the filter media at least 24 inches? (N.J.A.C. 7:10-11.14(c)5iv)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Is the maximum head loss through the filters no greater than 8 feet of water? (N.J.A.C. 7:10-11.14(c)5v)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Are regulating valves provided to control the filtration rates? (N.J.A.C. 7:10-11.14(c)6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. For dual media filters, is the sand bed a minimum of 12 inches thick? (N.J.A.C. 7:10-11.14(c)7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Is at least 12 inches of graded gravel placed over the underdrains? (N.J.A.C. 7:10-11.14(c)8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Is each filter provided with equipment to facilitate cleaning and placing or replacement of the filter media? (N.J.A.C. 7:10-11.14(d))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Is filtered water used for backwashing? (N.J.A.C. 7:10-11.14(e)1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Is the backwash rate at least 15 gallons per minute per square foot? (N.J.A.C. 7:10-11.14(e)2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Does the backwash process allow for a minimum of 30% expansion of the filter media? (N.J.A.C. 7:10-11.14(e)2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Are reduced pressure zone backflow preventers provided to prevent back siphonage of the filter surface wash water? (N.J.A.C. 7:10-11.14(e)3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Is backwash waters discharged in accordance with NJPDES requirements? (N.J.A.C. 7:10-11.14(e)4) NJPDES Permit Number: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

YES NO N/A

22. Are there any direct connections between backwash water lines and sanitary or storm sewer lines? (N.J.A.C. 7:10-11.14(e)4)

23. Are discharges made through an above ground air gap? (N.J.A.C. 7:10-11.14(e)4)

Submit appropriate engineering plans, specifications, reports, etc. to substantiate your answers

I hereby certify that answers provided herein are accurate and reflective of the project being considered for approval.

Signature of Engineer Date
Professional Engineer's Embossed Seal

N.J.P.E. #

Type or Print Name of Engineering Firm

PA14 (09/13)

