



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Water Supply

BRP WS 29 Chemical Addition Retrofit

for systems that serve more than 3,300 people

Instructions and Supporting Materials

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Introduction

MassDEP *Permit Applications*, as well as *Instructions & Support Materials*, are available for download from the MassDEP Web site at mass.gov/dep in two file formats: Microsoft Word™ and Adobe Acrobat PDF™. Either format allows documents to be printed.

Instructions & Support Materials files in Microsoft Word™ format contain a series of documents that provide guidance on how to prepare a permit application. Although we recommend that you print out the entire package, you may choose to print specific documents by selecting the appropriate page numbers for printing.

Permit Applications in Microsoft Word™ format must be downloaded separately. Users with Microsoft Word™ 97 or later may complete these forms electronically.

Permitting packages in Adobe Acrobat PDF™ format combine *Permit Applications* and *Instructions & Support Materials* in a single document. Adobe Acrobat PDF™ files may only be viewed and printed without alteration. *Permit Applications* in this format may not be completed electronically.



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Permit Fact Sheet

1. What is the purpose of this permit?

This permit serves to protect the public's health and welfare by insuring that minimum drinking water requirements are met in the chemical addition retrofit of water systems. It consists of an approval for chemical addition retrofit of water systems, for systems that serve more than 3,300 people. For systems that serve less than or equal to 3,300 people, apply for BRP WS 34. Legislative authority is stated in MGL Chapter 111 s. 160A et al. Regulatory authority is stated in 310 CMR 22.04 of the Drinking Water Regulations.

2. Who must apply?

Public water suppliers that serve more than 3,300 people or their representatives who want approval for the chemical addition retrofit of their water system.

3. What other requirements should be considered when applying for this permit?

If the water supplier or their representatives apply for this permit it may also be necessary for them to apply for other MassDEP water treatment permits, e.g. BRP WS 23 or BRP WS 24.

Note: These additional requirements are intended to serve as a guide to the applicant. It does not necessarily include all additional requirements.

4. What is the application fee?

The application fee is \$575.

5. What is the Primary Permit Location? What is the Reserve Copy Location?

PRIMARY PERMIT LOCATION
Department of Environmental Protection
_____ * Regional Office

RESERVE COPY LOCATION
None Required.

Water Supply

*Find your region: <http://mass.gov/dep/about/region/findyour.htm>

6. Where can I get a copy of the timelines?

The timelines are available on the MassDEP Website: www.mass.gov/dep/service/online/fees.htm

7. What is the annual compliance fee?

There is no annual compliance assurance fee for this permit.

8. How long is this permit in effect?

This permit is in effect as long as the applicant remains in compliance with appropriate laws and regulations and the Department determines that the product or operations continue to protect the public health and welfare.

9. How can I avoid the most common mistakes made in applying for this permit?

- a. Fill in all information on the MassDEP Application Form BRP WS Application.



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Permit Fact Sheet

- b. Attach all information requested on the Application Completeness Checklist.
- c. Send application and one copy of the MassDEP Transmittal Form to MassDEP Regional Office, Water Supply.
- d. Submit fee and one copy of the MassDEP Transmittal Form to: Department of Environmental Protection, P.O. Box 4062, Boston, MA 02211.

10. What are the regulations that apply to this permit? Where can I get copies?

These regulations include, but are not limited to:

- a. Drinking Water Regulations, 310 CMR 22.00.
- b. Timely Action and Fee Provisions, 310 CMR 4.00.

These may be purchased at:

State House Bookstore
Room 116
Boston, MA 02133
617-727-2834

State House West Bookstore
436 Dwight Street
Springfield, MA 01103
413-784-1376



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Application Completeness Checklist

- The MassDEP Transmittal Form is completed: <http://mass.gov/dep/service/online/trasmfrm.shtml>
- Form BRP WS Application is completed.
- A cover letter explaining the request is attached.
- Documentation to support the request.
- A MassDEP application for chemical addition retrofit.
- A Massachusetts Professional Engineer's Certification and dated stamp.

To submit the application package:

- Checklist items have been completed.
- Send two copies of the application along with one copy of the MassDEP Transmittal Form to:

Department of Environmental Protection
_____ * Regional Office

Water Supply

*Find your region: <http://mass.gov/dep/about/region/findyour.htm>

- Send fee of \$575 in the form of check or money order made payable to *Commonwealth of Massachusetts*, along with one copy of the MassDEP Transmittal Form to:

Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211



BRP WS Application

For Water Supply Permits or Approvals

Transmittal Number _____

Facility ID# (if known) _____

A. Application

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Is this application for an Original or a Resubmittal?

2. Applicant:

Name _____			Address _____	
City _____	State _____	Zip _____	Contact _____	Telephone _____

3. Consultant:

Name _____			Address _____	
City _____	State _____	Zip _____	Contact _____	Telephone _____

B. Permit

Please check which permit or approval you are applying for:

Zone II Determination for Existing Sources

- BRP WS 07 Approval to Conduct Pump Test for Zone II Delineation
- BRP WS 08 Approval of Zone II Delineation

New Technology

- BRP WS 11 Minor New Technology Approval; where no field test required
 - Drinking Water Additive
 - Cross Connection Device
 - Water Vending Machine
 - Other(specify): _____
- BRP WS 12 Major New Technology Approval: where field testing is required
- BRP WS 27 New Technology with Third-party Approval
- BRP WS 28 Vending Site/Source Prototype
- BRP WS 30 Vending Site Approval
- BRP WS 31 Vending and POU/POE Devices with Third-party Approval

New Source Approvals <70 gpm

- BRP WS 13 Exploratory Phase, Site Examination, Land Use Survey and Approval to Conduct Pumping Test
- BRP WS 15 Pumping Test Report Approval and Approval to Construct Source

New Source Approvals >70 gpm

- BRP WS 17 Exploratory Phase, Site Examination & Land Use Survey
- BRP WS 18 To Conduct Pumping Test
- BRP WS 19 Pumping Test Report Approval
- BRP WS 20 To Construct Source

Water Treatment Approvals

- BRP WS 21 To Conduct Pilot Study
- BRP WS 22 Pilot Study Report
- BRP WS 23 To Construct Facility <1 mgd
- BRP WS 24 To Construct Facility >1 mgd
- BRP WS 25 Treatment Facility Modification
- BRP WS 29 Water Treatment: Chemical Addition Retrofits of Water Systems > 3,300 people
- BRP WS 34 Water Treatment: Chemical Addition Retrofits of Water Systems < 3,300 people

Water Quality Assurance

- BRP WS 26 Sale or Acquisition of Land for Water Source
- BRP WS 36 Abandonment of Water Source

Distribution System Modifications

- BRP WS 32 Systems > 3,300 people
- BRP WS 33 Distribution Modifications < 3,300 people

C. Certification

"I certify, under penalty of law, that this application and all attachments were prepared under my supervision, in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted in this application, the information submitted is, to the best of my knowledge and belief, true, accurate and complete."

Print Name _____

Authorized Signature _____

Position/Title _____

Date _____



BRP WS 29 Chemical Addition Retrofit

Application for Approval for Treatment of Public Water Supply Systems That Serve More Than 3,300 People

Transmittal Number _____

Facility ID# (if known) _____

A. Water Supply Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Name of Applicant – Board of Water Commissioners or similar body: _____
2. PWS I.D.#: _____
3. City or Town: _____
4. Total population served by system (estimate if necessary): _____
5. Other City, Town, District, Institution or Area Served: _____
6. PWS I.D.#: _____

B. Treatment Information

Note: Treatment of public water supply may be adopted, modified, or discontinued only with the approval of the Department of Environmental Protection.

1. Sources of Water Supply to be treated:

i. _____	ii. _____
iii. _____	iv. _____
2. Treatment Type (See list A below): _____
3. Treatment Processes (See list B below):

_____	_____
Treatment Type	Code Number
4. Chemicals to be used: _____

List A – Treatment Type

Disinfection By-Product Control
Corrosion Control
Disinfection Dechlorination
Iron Removal
Inorganic Removal
Fluoridation
Manganese Removal
Organic Removal
Particulate Removal
Radionuclides Removal
Softening
Taste/Odor Control

List B – Treatment Processes and Code Numbers

100 Activated Alumina	403 Gas. Chlorination - Pre	600 Rapid mix
121 Activated Carbon (Granular)	421 Hypochlorination - Post	620 Reducing Agents
125 Activated Carbon (Powder)	423 Hypochlorination - Pre	623 Reducing Agents - Sodium Bisulfate
160 Algae Control	441 Inhibitor - Bimetalic Phosphate	625 Reducing Agents - Sodium Sulfite
180 Bone Char	443 Inhibitor - Hexametaohosphate	627 Reducing Agents - Sulfur Dioxide
200 Chloramines	445 Inhibitor - Orthophosphate	640 Reverse Osmosis
220 Chlorine Dioxide	447 Inhibitor - Polyphosphate	660 Sedimentation
240 Coagulation	449 Inhibitor - Silicate	680 Sequestration
300 Distillation	460 Ion Exchange	700 Sludge Treatment
320 Electrodialysis	500 Lime - Soda Ash Addition	720 Ultraviolet Radiation
360 Flocculation	520 Microscreening	740 pH Adjustment
380 Fluoridation	560 Permaganate	741 pH Adjustment - Post
401 Gas. Chlorination - Post	580 Peroxide	742 pH Adjustment - Pre



BRP WS 29 Chemical Addition Retrofit

Application for Approval for Treatment of Public Water
Supply Systems That Serve More Than 3,300 People

Transmittal Number _____

Facility ID# (if known) _____

C. Feed Points

	Feed Point #1		Feed Point #2	
Feed Point(s):	_____		_____	
Type of Feed Equipment:	_____		_____	
Flow Rate (GPM):	_____	_____	_____	_____
	Max	Min	Max	Min
Water Pressure:	_____	_____	_____	_____
	Max	Min	Max	Min
Feeder Capacity (Gal/24 hr or lbs/24 hr):	_____	_____	_____	_____
	Max	Min	Max	Min

D. Designer

1. Design Engineer: _____

2. Massachusetts Registration Number: _____

E. Certificate

The undersigned certify that the treatment facility will be operated under the supervision of the person named in Section F (or designated alternate) who will be in responsible charge of the operation, will comply with instructions and requirements of the Department of Environmental Protection, including those pertaining to maintenance of equipment, records and reports, performance of routine tests and submission of routine samples.

It is understood that any change of assignment in Sections F or G must be reported promptly in writing to the Department of Environmental Protection.

Name

Title

Signature

Date

F. Employee in Responsible Charge of Treatment Facility

Name

Title

Certified Operator License Number

Grade

Signature

Date



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Water Supply

BRP WS 29 Chemical Addition Retrofit

Application for Approval for Treatment of Public Water
Supply Systems That Serve More Than 3,300 People

Transmittal Number

Facility ID# (if known)

F. Employee in Responsible Charge of Treatment Facility (cont.)

Office Address and Telephone:

Street Address

City/Town

State

Zip Code

Office Telephone Number (including extension)

Home Address and Telephone:

Street Address

City/Town

State

Zip Code

Home Telephone Number

G. Alternate Employee in Responsible Charge of Treatment Facility

Name

Title

Certified Operator License Number

Grade

Signature

Date

Office Address and Telephone:

Street Address

City/Town

State

Zip Code

Office Telephone Number (including extension)

Home Address and Telephone:

Street Address

City/Town

State

Zip Code

Home Telephone Number