Department: In all Civil Divisions
Classification: Competitive
SPEC DISK C3
DOCUMENT 47

Grade:

# CHIEF WATER AND WASTEWATER TREATMENT PLANT OPERATOR

(NYS Department of Health-Water Treatment Plant Operator) (NYS Department of Environmental Conservation-Wastewater Treatment Operator)

<u>DISTINGUISHING FEATURES OF THE CLASS:</u> The work involves responsibility for the actual operation of a water treatment plant and a wastewater treatment plant and for the maintenance and repair of the water and wastewater lines. This is routine but important work involving responsibility for the efficient operation and maintenance and repair of water and wastewater lines. The work is performed in accordance with policies determined by the Town Board. Supervision may be exercised over the subordinate employees in the performance of their assigned duties. The incumbent does related work as required.

## TYPICAL WORK ACTIVITIES: (Illustrative only)

Operates pumps, valves, motors and related machinery and equipment;

Makes minor repairs to machinery and equipment;

Records readings of meters, gauges and scales;

Takes samples of water and wastewater for testing;

Regulates and adjusts chlorinators for water and wastewater plants;

Cleans sludge beds and assists in the disposal of dried sludge;

Repairs water mains, service lines, valves and hydrants;

Cleans and releases plugged and broken wastewater lines;

Keeps a log of plant operations and related records;

Performs custodial duties in connection with maintenance of buildings and grounds.

#### FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Good knowledge of the practices used and the equipment required in the operation and maintenance of a Water Treatment Plant with facilities for the application to the water of chemicals having a direct health significance such as chlorine or chlorine compounds, fluoride compounds or the process of dechlorination or any similar process and in a Wastewater Treatment Plant with facilities for plain settling or the use of an Imhoff tank or the use of a stabilization or oxidation pond; working knowledge of the principles and applications of physics, chemistry and bacteriology as they relate to water purification and to wastewater treatment and disposal; skill in the operation and repair of pumps, valves and related mechanical and electrical equipment; ability to read, understand and record data from gauges, scales and meters; ability to carry out oral and written directions; mechanical aptitude; alertness and dependability; physical condition commensurate with the demands of the position.

# MINIMUM QUALIFICATIONS:

#### CHIEF WATER TREATMENT PLANT OPERATOR: Either:

(a) Type I-A Water Treatment Plant with facilities for filtration which treats over 2.5 MGD (million gallons per day) High school diploma or New York State equivalency diploma and successful completion of appropriate

level water treatment operator courses; and

Ten years of acceptable operating \*experience with one year at a water treatment plant with facilities for filtration.

### CHIEF WATER AND WASTEWATER TREATMENT PLANT OPERATOR - Continued

(NYS Department of Health-Water Treatment Plant Operator)

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- (b) Type II-A Water Treatment Plant with facilities for filtration which treats 2.5 MGD or less. High school diploma or New York State equivalency diploma and successful completion of appropriate level water treatment operator courses; and One year of acceptable operating experience at a water treatment plant with facilities for filtration.
- (c) Type I-B Water Treatment Plant without facilities for filtration which treats over 2.5 MGD. High school diploma or New York State equivalency diploma and successful completion of appropriate level water treatment operator courses; and Ten years of acceptable operating \*experience at a water treatment plant.
- (d) Type II-B Water Treatment Plant without facilities for filtration which treats 2.5 MGD or less and serves more than 1,000 people. High school diploma or New York State equivalency diploma and successful completion of appropriate level water treatment operator courses; and One year of acceptable operating experience at a water treatment plant.
- (e) Type C Water Treatment Plant (without facilities for filtration) and/or a distribution system that serves 1,000 people or less. Successful completion of appropriate level water treatment operator courses; and Six months of acceptable operating experience at a water treatment plant.
- (f)Type D Distribution System (all systems). Successful completion of distribution system operator courses; and One year of acceptable operating and maintenance experience in a distribution system.
  - \* The ten-year period of experience may be reduced through education at a rate of two years of experience being equivalent to one full year of college level education. College credits in engineering, natural sciences and other related fields may be substituted for experience at and approximate rate of one college credit hour in the sciences being considered equivalent to one month of experience. Two years of acceptable experience is a minimum, regardless of education.

# <u>CHIEF WATER AND WASTEWATER TREATMENT PLANT OPERATOR</u> - Continued

(NYS Department of Health-Water Treatment Plant Operator)

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# WATER TREATMENT PLANT GRADES

Adrian Acres West	С
AuSable Acres	C
AuSable Water District	IIB
Bloomingdale Village Water Supply	IIA
Claymore Homes	No Treatment Necessary
Crown Point Water District	C
Elizabethtown Water District	IIB
Essex Water District	C
Graeff Water Supply	No Treatment Necessary
Jay Water District	С
Keene Water District #1	С
Keene Water District #2	С
Keeseville Village Water Supply	IIB
Lake Placid Village Water Supply	IIB
Lewis Water District	С
Minerva Water District	С
Moriah Water District #1	IIA
Moriah Water District #2	IIA
New Russia Water District	С
Port Henry Village Water Supply	IIA
Port Kent Water Supply	No Treatment Necessary
Ray Brook Water District	С
Schroon lake Water District	IIB
Schroon River Union	С
Ticonderoga Village Water Supply	IIB
Upper Jay Water District	С
Wadhams Water District	С
Westport Village Water Supply	No Treatment Necessary
Willsboro Water District	IIA
Wilmington Water District	IIB
Winebrook Hills Water District	IIA

An operator possessing a license higher than a plant grade can operate the lower grade plant, i.e. a IIB operator can operate a C grade plant.

# CHIEF WATER AND WASTEWATER TREATMENT PLANT OPERATOR - Continued

(NYS Department of Health-Water Treatment Plant Operator)

(NYS Department of Environmental Conservation-Wastewater Treatment Operator)

#### MINIMUM QUALIFICATIONS:

#### CHIEF WASTEWATER TREATMENT PLANT OPERATOR: Either:

- (a) Type A Treatment Plants with activated sludge process (including all modifications) High school or high school equivalency diploma; and appropriate course of instruction approved by the State Department of Environmental Conservation; and
  - I-A requires one year operation experience at a plant with facilities equivalent to Type A plant, with ability to make necessary tests.
  - II-A requires six months operation experience as stated in I-A.
  - III-A requires three months operating experience as stated in I-A.
- (b) Type B Treatment Plants with chemical precipitation or sludge vacuum filtration or sludge incineration or sludge oxidation or separate sludge digestion or biological oxidation process. High school or high school equivalency diploma, and appropriate course of instruction approved by the State Department of Environmental Conservation; and
  - I-B requires one year operating experience at a plant with facilities equivalent to Type B plant, with ability to make necessary tests.
  - II-B requires six months operating experience as stated in I-B.
  - III-B requires three months operating experience as stated in I-B.
- (c) Type C Treatment Plants with Settling Tank (Plain or septic or Imhoff) or stabilization or oxidation pond. High school or high school equivalency diploma and appropriate course of instruction approved by the State Department of Environmental Conservation; and
  - II-C requires four months operating experience at a plant with facilities equivalent to Type C plant, with ability to make necessary tests.
  - III-C requires two months operating experience as stated in II-C.
  - \* Qualifying options for Grade I-A and I-B:
    - (a) Bachelor of Science Degree from a duly accredited university or school or
    - (b) A New York State Professional Engineer's License or
    - (c) An Associate in Applied Science Degree from a duly accredited university or school in a curriculum approved by the New York State Department of Environmental Conservation plus 2 1/2 years of approved experience or
    - (d) An Associate in Applied Science Degree from a duly accredited university or school plus 5 years of approved experience or
    - (e) A high school diploma or equivalency certificate and 10 years approved experience.

#### WASTEWATER TREATMENT PLANT GRADES

Lake Placid	I-A	Winebrook Hills SD	III-A
Saranac Lake	I-A	Keeseville	III-B

Schroon Lake	II-A	Port Henry (future)	III-B
Ticonderoga	II-A	Port Henry	III-C
Westport	II-A	Moriah SD 1&2	III-C
		St. Armand	III-C

# CHIEF WATER AND WASTEWATER TREATMENT PLANT OPERATOR - Continued

(NYS Department of Health-Water Treatment Plant Operator)

(NYS Department of Environmental Conservation-Wastewater Treatment Operator)

## CHIEF WATER AND WASTEWATER TREATMENT PLANT OPERATOR/TRAINEE

## CHIEF WATER TREATMENT PLANT OPERATOR/TRAINEE

## **MINIMUM QUALIFICATIONS**:

Type IA	Water Treatment Plant with facilities for filtration which treats over 2.5 MGD (million gallons per day)	Graduation from high school or possession of a NYS equivalency diploma and nine years of acceptable operating *experience.
Type IIA	Water Treatment Plant with facilities for filtration which treats 2.5 MGD or less.	Graduation from high school or possession of a NYS equivalency diploma.
type IB	Water Treatment Plant without facilities for filtration which treats over 2.5 MGD.	Graduation from high school or possession of NYS equivalency diploma and nine years of acceptable operating *experience.
Type IIB	Water Treatment Plant without facilities for filtration which treats 2.5 MGD or less and serves more than 1,000 people.	No minimum qualifications.
Type C	Water Treatment Plant (without facilities for filtration) and/or a distribution system that serves a 1,000 people or less.	No minimum qualifications.
Type D	Distribution System (all systems)	No minimum qualifications.

<sup>\*</sup> The nine-year period of experience may be reduced through education at a rate of two years of experience being equivalent to one full years of college level education. College credits in engineering, natural sciences and other related fields may be substituted for experience at and approximate rate of one college credit hour in the sciences being considered equivalent to one month of experience. One year of acceptable experience is a minimum, regardless of education.

# CHIEF WASTEWATER TREATMENT PLANT OPERATOR/TRAINEE

### **MINIMUM QUALIFICATIONS:**

Graduation from high school or possession of a New York State high school equivalency diploma.