

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
DRINKING WATER PERMITTING & ENGINEERING PROGRAM

**PUBLIC WATER SUPPLY
SYSTEM DESCRIPTION**
for
Purchased Water Systems with/without Groundwater Sources
PART B

DATE: _____

SYSTEM NAME: _____

WSID No.: GA _____ **COUNTY:** _____

**NAME(s) OF OPERATOR(s)
WHO COMPLETED THIS FORM:** _____

**GEORGIA ENVIRONMENTAL PROTECTION DIVISION
PUBLIC WATER SUPPLY SYSTEM DESCRIPTION**

PART B

Date: ____/____/____

System Name _____

County: _____

ID No.: _____

Owner: _____

Phone: (____) _____

Mailing Address:

Official Contacted: _____

Title: _____

Phone: (____) _____

Plant Location

Treatment Type

1. _____
2. _____
3. _____

Community WS: ____ NTNCWS: ____ TNCWS: ____ Seasonal From: ____/____ to ____/____

PERMIT STATUS

Permitted Operating Capacity: _____ MGD

Plant Design Capacity: _____ MGD

Surface Water Withdrawal Permit No.: _____

Ground Water Use Permit No.: _____

Permitted Max. Day: _____ MGD

Permitted Monthly Avg.: _____ MGD

Permitted Monthly Avg.: _____ MGD

Permitted Annual Avg.: _____ MGD

PURCHASED WATER SOURCES:

Name of Water System

Purchase Meter Location

GPM Available

Describe Any Special Conditions:

WATER PLANT OPERATOR

Plant Classification for operator certification level: _____

Name of Principal Treatment Plant Operator: _____

Certification Level: _____

Names of other Plant Operators:

Certification Class: _____

Expires: _____

Certification Class: _____

Expires: _____

Certification Class: _____

Expires: _____

Distribution Operator: _____

Certification Expiration:

(list additional personnel on back)

NPDES Permit: Required Y/N

Permit No.: _____ Expires: _____

Certified Laboratory: Required: Y/N

Permit No.: _____ Name of Chief Lab Analyst: _____

GROUND WATER SOURCES:

How Many Wells: _____

<u>Well No.</u>	<u>Yield, gpm</u>	<u>Date Drilled</u>	<u>Location</u>	<u>Sanitary Protection Adequate</u>
_____	_____	_____	_____	Yes/No
_____	_____	_____	_____	Yes/No
_____	_____	_____	_____	Yes/No
_____	_____	_____	_____	Yes/No

Well Head Protection: Y/N

SPRING WATER SOURCES:

How Many: _____

Infiltration Gallery: Y/N

<u>Spring No.</u>	<u>Yield, gpm</u>	<u>Location</u>	<u>Subject to Flooding</u>
_____	_____	_____	Yes/No
_____	_____	_____	Yes/No
_____	_____	_____	Yes/No

Is the Spring Area? Owned: _____ Fenced and Posted: _____

Is the Spring Source? Enclosed: _____ Box Covered: _____ Locked: _____

Surface Water Diversion Channel Satisfactory: Y/N

Surface Water Run-off Satisfactory: Y/N

Contact Chamber Provided: Y/N Volume: _____ gal. Contact Time: _____ min.

CONSERVATION PROGRAM:

Plan Approved: Y/N Name of Responsible Official: _____ Title: _____

1990 Water Conservation Act Ordinance: Y/N

CROSS-CONNECTION CONTROL PROGRAM:

Required: Y/N Plan approved: Y/N

Name of Responsible Official: _____ Title: _____

CONSUMER & PRODUCTION DATA:

Describe Service Area: _____

Total Service Connections: Residential#: _____ Commercial#: _____

Wholesale#: _____ Metered: Y/N

Total Population Served: _____

List No. of known Unmetered Connections _____

Meter Replacement Program: Y/N How Frequent: _____

Meter Calibration Program: Y/N How Frequent: _____

During Last 12 Month Period (From _____ to _____):

Total Water Produced and/or Purchased: _____ MG,

Total Amount of Metered Sales: _____ MG Unaccounted-for-water: _____ %

Leak survey conducted: Y/N Date: _____

I. CHEMICAL STORAGE FACILITIES

STORAGE AREA	Y/N		BULK STORAGE TANKS	Volume(gal.)
Separate Storage Area			Alum	
Dry Chemicals on Pallets			Sodium Hydroxide	
Ventilation Adequate			Sodium Chlorite	
Forced Draft Ventilation			Hydrofluorosilic Acid	
Mechanical Handling Equipment			Phosphate	
Drainage Around Bulk Storage Area			Polymers	
Emergency Containment Area Provided			Lime Slurry	
Liquid Storage Tank Enclosed			Other	
Tank Contents Labeled at Refill Connections				
Tank Fill Connections Secured				

II. CHEMICAL FEED EQUIPMENT

DISINFECTION SYSTEMS

Type	No.	Capacity lbs/day	Operable Y/N	Flow Pacing Y/N	NSF60 Y/N	Separate Room: Y/N	Gas Chlorination System	Y/N Need
Gas, Cl ₂							Adequate Ventilation	
Ammonia							Separate Cylinder Storage Room	
NaOCl							Cylinders Secured	
ClO ₂							Protected From Sun Rays	
HTH							Ton Cylinders	
Ozone							150 lbs. Cylinders	
SO ₂							Scales	
Other							Evaporator	
							Leak Repair Kits	
							Chlorine Leak Dectector	
							Ammonium Hydroxide	
							Gas Mask: ___ Type: _____ Serviced Date: _____:	
							Automatic Change Over	

III. DRY CHEMICAL SYSTEMS

Feeders	No.	Type	Adequate Capacity: Y/N	Auto Flow Proportioning: Y/N	Operable Y/N	Other	Comment
Alum							
Lime/Soda Ash (Pre)							
Lime/Soda Ash (Post)							
Carbon							
Fluoride							
Potassium Permanganate							
Corrosion Inhibitors							
Other							

IV. LIQUID CHEMICAL SYSTEMS

Feeders	No.	Type	Adequate Capacity: Y/N	Auto Flow Proportioning: Y/N	Operable Y/N	Other	Comments
Alum							
Sodium Hydroxide							
Hydrofluorosilic Acid							
Sodium Chlorite							
Potassium Permanganate							
Corrosion Inhibitor							
Polymer							
Other							

COMMENTS:

V. UNIT PROCESSES

Chemical Addition

Chemical Application Point(s): Inline: Y/N ; Mixing Chamber:Y/N ; Other: _____
 Sequence of Chemical Addition: _____ Flow
 Mechanical Flash Mix: Y/N ; Static Mixer: Y/N ; Rapid (Hydraulic Mix): Y/N
 Continuous Monitoring: Streaming Current Detector: Y/N Provides flow pacing for _____
 Microprocessing Unit: Y/N Provides flow pacing for _____

Coagulation	Yes	No	Application Point
Alum			
Iron Salts			
Polymers			
Other			
Alkalinity Adjustment	Yes	No	Application Point
Lime			
Soda Ash			
Caustic Soda			
Other			
Iron/Manganese Cont.	Yes	No	Application Point
KMnO ₄			
ClO ₂			
Cl ₂			
Other			
Taste/Odor Cont.	Yes	No	Application Point
Activated Carbon(PAC)			
KMnO ₄			
ClO ₂			
Cl ₂			
Other			
Post-Treatment	Yes	No	Application Point
Gas, Cl			
ClO ₂			
Ammonia			
Lime			
Soda Ash			
Caustic Soda			
Corrosion Inhibitor			
Sodium Silicafluoride			
Hydrofluorosilic Acid			
Sodium Fluoride			

VI. FILTRATION

Filter Number:	thru	thru	thru	thru
Type Filter Units				
Gravity				
Pressure				
Last Inspection Date				
Other				
Total Filter Area (ft²)				
Permitted Filter Rate (GPMSFFA)				
Filter Media Configuration				
Mono (Sand, Anthracite or synthetic)				
Dual (Sand,Anthracite)				
Mixed (Sand, Anthracite, Garnet)				
Diatomaceous Earth				
Precoat Satisfactory				
Body Feed Satisfactory				
Material Specifications				
Effective Size/ Uniformity Coefficient				
Sand				
Anthracite				
Garnet				
Media Depth Satisfactory				
Last Date Installed				
Troughs				
Restrained				
Leveled				
Free Board (inches)				
Filter Agitator Type				
Air Scrubber				
Surface/Sub Surface Sweeps				
Last Inspection Date				
Backflow Preventor Provided				
Underdrain Type				
Date Installed				
Flow Rate Control System				
Mechanical				
Type				
Range to MGD				
Last Calibration Date				
Inlet Flow Control				
Declining Rate				
Head Loss Gage operable				
Flow Rate Gage Operable				
Filter Level Control Device				
Filters Operated Intermittently				
Filter to Waste Provided (Rewash)				
No. Minutes Rewashed				

Filter Number:	thru	thru	thru	thru
Turbidimeter				
Continuos Recorder				
Calibration Frequency				

VII. CORROSION CONTROL PROGRAM: Y/N

Describe: _____

Distribution System Flushing Program: Y/N Frequency: _____

Person(s) responsible for flushing: _____

Distribution System Corrosion Evaluation Studies Conducted: Y/N Date: _____

Describe type and length of study: _____

Describe Corrosion Study Results : _____

Red Water & other corrosion related complaints: Y/N Corrosion Inhibitors used: _____

Finished Water pH Value Maintained _____ units Application rate: _____ mg/l

VIII. CLEARWELL & PLANT STORAGE

No.	Clearwell(s) Storage Capacity(MG)	Pump Suction Well Capacity	Baffled Y/N	Drain Valve Y/N	Screened Overflow Satisfactory Y/N	Screened Vent Satisfactory Y/N	Access Cover Secured Y/N	Comments
1								
2								
3								
4								
5								
6								

Clearwell operated on fill & draw : Y/N

Clearwell floats on system: Y/N

High Service Pumps	Type	Capacity gpm/mgd	Auxillary Power available Y/N
1			
2			
3			
4			
5			

Maximum Pump Capacity: _____ MGD

Finished Water Meter: Y/N Type: _____

Number of Finished Water Mains: _____ inches

Size(s): _____ inches

High Service Pumps Water Lubricated: Y/N

Last Date Calibrated: _____

Distance to first customer: _____ feet

_____ inches

IX. DISTRIBUTION SYSTEM

Current Distribution System Map Available: Y/N Location: _____

Standard Material & Construction Specifications Filed with EPD: Y/N

Construction Projects Receive Prior Approval From EPD: Y/N, If NO, Explain: _____

Total Miles feet of Lines in Distribution System (approx.):

Percentage of Pipe Material:

DI: _____ CI: _____ PVC: _____ AC: _____ Galvanized: _____ Concrete: _____

OTHER: _____

A. LIST PRESSURE ZONES: (give elevations)

1. _____
2. _____
3. _____

B. BOOSTER PUMP STATIONS

Location	Number Pumps	Capacity (MGD)	Auxillary Power Avail.
_____			Y/N
_____			Y/N
_____			Y/N

C. STORAGE FACILITIES

Location	Type	Material	Volume	Fenced	Overflow Screened	Drain	Altitude Valve	Coating Condition	Comments

D. BOOSTER CHLORINATION FACILITIES

Locations:

1. _____
2. _____

E. DISTRIBUTION SYSTEM MONITORING

Cl₂ Residual: _____ Flow: Y/N Pressure: Y/N

Tank levels monitored: Y/N

Other: _____

F. SAMPLING PLAN

Microbiological Sample siting plan reviewed and approved: Y/N

Number of sampling sites required: _____ Adequate: Y/N

Sites representative of the distribution system: Y/N

Sites regularly used: Y/N

X. LABORATORY CONTROL

YES/NO		NEED
	Separate space for lab	
	HVAC adequate	
	Lab protected from direct sunlight	
	Lab clean	
	Adequate storage	
	Adequate glassware	
	Balance	
	Refrigerator	
	Colorimeter / Spectrophotometer	
	Jar test equip. with lighted base	

Fresh Reagent Solutions available for all test procedures? Y/N

ALKALINITY

Buret
Sulfuric acid, N/ 50
Methyl purple

PH

Electric pH meter Type: _____ Standardization Frequency: _____
Buffer solutions: _____
Colorimeter comparator: Y/N
Bromomethyl Blue
Phenol Red
Thymol Blue
Sodium Thiosulfate, 0.1 N

Cl₂ RESIDUAL COMPARATOR

Type: Orthotolidine
DPD
Amperometric Titration

CHLORINE DIOXIDE

Test method: _____

TOC

Test method: _____

SUVA

Test method: _____

TURBIDITY

Standards: Type: _____
Meter: Model: _____ Serviced: _____ Calibration Frequency: _____

MANGANESE

Test method: _____ Reagent: _____

IRON

Test Method: _____ Reagent: _____

FLUORIDE

Test Method: _____ Reagent: _____

HARDNESS

Test Method: _____ Reagent: _____

_____ Test Method: _____ Reagent: _____

_____ Test Method: _____ Reagent: _____

XI. CONTINUOUS MONITORING

	Raw	Treated	Filtered	Finished
pH Value				
Chlorine Res. FACR				
Particle Counter				
Turbidity, NTU				
Fluoride				
Pilot Filter				

XII. RECORD KEEPING

Operational Reports Available at Plant: Y/N Number of Years: _____

Microbiological Reports Available at Plant: Y/N Number of Years: _____

Chemical Reports Available at Plant: Y/N Number of Years: _____

Inorganic:___ Organic:___ Radiological:___ THMs:___ VOCs:___ Turbidity:_____

Corrosion Control Data:_____

Violation Records:_____

Other: _____

XIII. SAFETY

Does Plant have a Safety program: Y/N

Fire Extinguishers: Y/N; First Aid Kits: Y/N; Emergency eyewash Stations: Y/N

Safety rails around basin: Y/N; Appropriate Warning signs on equipment: Y/N

COMMENTS: