

# INSTRUCTIONS AND APPLICATION FOR A GROUNDWATER AND/OR SURFACE WATER WITHDRAWAL IN THE DELAWARE RIVER BASIN

#### Who must apply?

An application must be submitted by anyone proposing:

- A withdrawal from a single well or a group of wells operated as a system exceeding a daily average gross withdrawal of 100,000 gallons per day (gpd) during any 30 consecutive day period, for any purpose.
- A withdrawal from impoundments or running streams exceeding a daily average gross withdrawal of 100,000 gpd during any 30 consecutive day period, for any purpose.
- A withdrawal from a single well or group of wells operated as a system exceeding a daily average gross withdrawal of 10,000 gpd during a 30-day period, for any purpose, within the Southeastern Pennsylvania Ground Water Protected Area. The Delaware River Basin Commission (DRBC or Commission) Ground Water Protected Area Regulations: Southeastern Pennsylvania is available on the DRBC website at <a href="http://www.nj.gov/drbc/library/documents/gwpa">http://www.nj.gov/drbc/library/documents/gwpa</a> regs.pdf
- An increased ground and/or surface water withdrawal, regardless of the quantity proposed for a project previously approved by the Commission.
- A renewal of an existing withdrawal previously approved by the Commission.
- A diversion or transfer (exportation or Importation) of water into or out of the Delaware River Basin (DRB) with a design capacity in excess of a daily average rate of 100,000 gallons.
- Existing users without a DRBC docket (or GWPA permit) or allocation (i.e., entitlement holders or docket/permit holders without an allocation) that exceed the thresholds described above.
- Groundwater and surface water withdrawals in the State of New Jersey that require review as specified in the March 2015 Administrative Agreement (AA) between the DRBC and New Jersey Department of Environmental Protection for inclusion in the DRBC Comprehensive Plan.
- Groundwater and surface water withdrawals in the State of Delaware that require review as specified in the July 2010 Administrative Agreement (AA) between the DRBC and Delaware Department of Natural Resources and Environmental Control.

#### How to file application?

- 1. Complete this application form.
- **2.** Assemble the completed application form and attachments in one or more electronic files.
- **3.** Go to <u>applications.drbc.net</u> and select "Create Account" to create a new account. Once you have established an account, return to <u>applications.drbc.net</u> and "Sign in" to your account.
- **4.** After you have signed in, upload the completed application and accompanying materials. You may add or remove files from your account as necessary. DRBC staff will be automatically notified that your materials have been submitted.
- **5.** Payment of the Application Fee is required by a check payable to "Delaware River Basin Commission". Please follow the payment instructions on the <u>Application Fee Form</u>. The completed fee form and payment should be mailed together to:

#### **Delaware River Basin Commission**

PO Box 7360 25 Cosey Road West Trenton, NJ 08628-0360

Alternatively, this completed withdrawal application, the Application Fee Form, and Fee may be printed and mailed to the above address.

#### **State Regulatory Agencies:**

Please contact the appropriate state agency to inquire as to what permits are necessary for the project withdrawal.

**DELAWARE:** 

(302) 739-9945

Delaware Department of Natural

Resources And Environmental

Control

89 Kings Highway

Dover, Delaware 19901

**NEW JERSEY:** 

(609) 292-2957

New Jersey Department of Environmental

Protection

Division of Water Resources

Bureau of Water Allocation

PO Box 426

Trenton, New Jersey 08625

<u>NEW YORK</u>: New York State Department of Environmental Conservation Regional Offices serving the Delaware Basin are as follows:

Region 3 (Orange, Sullivan, Ulster counties):

(914) 256-3054

21 South Putt Corners Road

New Paltz, New York 12561

Region 4 (Delaware, Scholarie counties):

(518) 357-2069

Route 10

Stamford, New York 12167

Region 7 (Broome, Chenango counties):

(315) 426-7400

615 Area Boulevard West

Syracuse, New York 13204-2400

<u>PENNSYLVANIA</u>: All applications for public water supply withdrawal projects located in the Commonwealth should be submitted to the appropriate regional office of the Pennsylvania Department of Environmental Protection as indicated below.

Southeast Regional Office: (Bucks, Chester, Delaware, Montgomery, Philadelphia counties):

(484) 250-5900

2 East Main Street

Norristown, Pennsylvania 19401

Northeast Regional Office: (Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton,

Pike, Schuylkill, Wayne counties):

(717) 826-2525

2 Public Square

Wilkes-Barre, Pennsylvania 18711-0790

South-central Regional Office: (Berks, Lancaster, Lebanon counties):

(717) 705-4707

909 Elmerton Avenue

Harrisburg, Pennsylvania 17110-8200

A well registration form must be completed for any new well and sent to the appropriate state agency. Send the original registration form to the state agency and include copies in this application to DRBC.

Pennsylvania (717) 772-4048

Pennsylvania Well Registration Form

Pennsylvania Dept. of Environmental Protection

Division of Water Planning and Allocation

PO Box 8555

Harrisburg, Pennsylvania 17105-8555

Delaware (302) 739-4793

Delaware Dept of Natural Resources and

Environmental Control Water Supply Section

Water Resources Division

89 Kings Highway

Dover, Delaware 19901

New Jersey (609) 292-0604

New Jersey Well Permits and Records Form

New Jersey Dept. of Environmental Protection

Bureau of Water Allocation

PO Box 029

Trenton, New Jersey 08625

New York (518) 457-1254

New York Well Data Form

New York Dept. of Environmental

Conservation

50 Wolf Road, Room 301

Albany, New York 12233

**DRBC Southeastern Pennsylvania Ground Water Protected Area:** This application is appropriate for projects located within the GWPA of Southeastern Pennsylvania. Counties included in the GWPA are as follows:

Berks (Douglass, Hereford, Union Townships only)

Bucks (see Regulations for specific municipalities)

Chester (see Regulations for specific municipalities)

Lehigh (Lower Milford Township only)

Montgomery (All of the area within the county boundary)

#### **Glossary for DRBC Application:**

**ADF:** Average daily flow of a stream at the point of withdrawal over a period of record.

**Agricultural Irrigation:** Irrigation used for the purpose of growing, harvesting, and producing plant crops or their products for the use or consumption by humans and/or animals.

cfs: Rate of flow in cubic feet per second.

**Consumptive Use:** The water lost due to transpiration from vegetation in the building of plant tissue, incorporated into products during their manufacture, lost to the atmosphere from cooling devices, evaporated from water surfaces, exported from the Delaware River Basin, or any other water use for which the water withdrawn is not returned to the waters of the basin undiminished in quantity.

**DMS:** Latitude and Longitude coordinates in Degrees (°), Minutes ('), Seconds (") format.

**DRB:** Delaware River Basin

**Docket:** A legal document granting approval for a project having a substantial effect on the water resources of the Basin.

**Existing Well/Intake:** A source previously approved by a DRBC docket/permit.

**Export:** Water withdrawal within the Delaware River Basin that is diverted or transferred outside of the DRB.

gpd: gallons per day
gpm: gallons per minute

**Import:** Water withdrawal outside the Delaware River Basin that is diverted or transferred into the DRB.

mg: million gallons

mgd: million gallons per day

**mgm:** million gallons per month. Monthly allocations are established based upon the maximum withdrawal expected during any one month (31 days) of the calendar year.

mg/30 days: million gallons per 30 days

**New Well/Intake:** A source not previously approved by a DRBC docket/permit.

**GWPA Permit:** A withdrawal docket in the GWPA for average uses between 10,000 gpd and 100,000 gpd.

**Public Water Supply:** A water supply source (well, intake, etc.) used to provide water for public or community consumption.

**Purveyor:** Any person, corporation, firm, or entity supplying water for public or community supplies.

**Q**<sub>7-10</sub>: A statistical estimate of the lowest average flow during a consecutive 7-day period with an average recurrence interval of 10 years (include period of record and gage used in calculation).



# APPLICATION FOR A GROUND OR SURFACE WATER WITHDRAWAL PROJECT IN THE DELAWARE RIVER BASIN

Pursuant to the Delaware River Basin *Compact* and the *Rules of Practice and Procedure* of the DRBC, application is hereby made for review of the project described below:

1.	Applicant Informa	ation: (pleas	se print or type)			
	Applicant Name (I	Legal Name)	): <u> </u>			
	Parent Corporation	on Name, if o	different:			
	Contact Name and	d Title:				
	Mailing Address:					
		City:		State:	Zip:	
	Telephone:			Fax:		
	Email Address:					
	Representing Atto	orney Name	, if applicable:			
	Mailing Address:					
		City:		 State:	Zip:	
	Telephone:			 Fax:		
	Email Address:					
2.	Consultant Inform	mation:				
	Name of Engineer	r/Geologist:				
	Name of Firm:					
	Mailing Address:					
	Phone:					
	Email Address:					

#### 3. CERTIFICATION AND SIGNATURE OF APPLICANT

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that pursuant to Section 14.17 of the Delaware River Basin Compact, an attempt to violate a rule, regulation, or order of the Commission, including by knowingly or negligently submitting false information, may result in penal sanctions that include fines of up to \$1,000 per day.

Name:	Official Title:
Signature:	
Date:	

4.	Purpose of Withdrawal: (check all tha	t apply and at least one)	
	Domestic Use		
	Public water supply	Private water supply	
	Commercial Use		
	Bottled water operations	Snowmaking	Fish hatchery
	Other		
	Industrial Use		
	Industrial process	Industrial cooling	
	Groundwater remediation	Natural gas developmen	t
	Hydrostatic testing	☐ Electric Generating/Coge	nerating
	Other		
	Irrigation Use		
	Agricultural	Golf course	Nursery
	Other		

Please provide a **Project Narrative** which generally describes the proposed project:

#### **WATER DEMANDS**

5. Present water use for all existing wells and surface water sources serving the system (Use zeros if not applicable. Please tab to or select another field before moving out of table to ensure proper calculation):

	Population	Service	Self-Supplied	Ground (mgd)	Self-Supplied	Surface (mgd)	Interconnec	ctions (mgd)	Total Self	Supply	Peak Month	Estimated
Water Use	Served	d Connections <sup>1</sup>	Average	Maximum	Average	Maximum	Bulk Purchase	Bulk Sale	Average Daily (mgd)	Maximum Daily (mgd)	Use (mg)	Consumptive Use (%) <sup>2</sup>
Domestic Use												
Commercial Use												
Industrial Process												
Industrial Cooling												
Irrigation												
Other												
Total Water Use												

6. Projected water use (10 years from application date) for all existing and new wells and surface water sources serving the system (Use zeros if not applicable. Please tab to or select another field before moving out of table to ensure proper calculation):

Watashia	Population	Service	Self-Supplied	Ground (mgd)	Self-Supplied	Surface (mgd)	Interconnec	ctions (mgd)	Total Self	Supply	Peak Month	Estimated
Water Use	Served	Served Connections <sup>1</sup>	Average	Maximum	Average	Maximum	Bulk Purchase	Bulk Sale	Average Daily (mgd)	Maximum Daily (mgd)	Use (mg)	Consumptive Use (%) <sup>2</sup>
Domestic Use												
Commercial Use												
Industrial Process												
Industrial Cooling												
Irrigation												
Other												
Total Water Use												

<sup>1 -</sup> Water purveyors only

<sup>2 –</sup> Consumptive use is defined as the water lost due to transpiration from vegetation in the building of plant tissue, incorporated into products during their manufacture, lost to the atmosphere from cooling devices, evaporated from water surfaces, exported from the Delaware River Basin, or any other water use for which the water withdrawn is not returned to the waters of the basin undiminished in quantity.

7. Requested allocation from existing and new well(s) and/or intake(s) (Use zeros if not applicable. Please tab to or select another field before moving out of table to ensure proper calculation):

Intake   Designation   Rate (gpm)   Allocation (mgm)   Existing   New   New   Existing   New   New   Existing   New   New	uested ocation ngm)
Designation   Rate (gpm)   (mgm)   Designation   Rate (gpm)   (mgm)	
□ Existing         □ Existing           □ Existing         □ Existing           □ New         □ New	ngm)
□ New         □ Existing           □ New         □ New	
□ Existing         □ New           □ Existing         □ Existing           □ New         □ New	
New         □ Existing           New         □ Existing           Existing         □ Existing           New         □ New           Existing         □ Existing           New         □ New           Existing         □ Existing           New         □ New           Existing         □ New           New         □ New           Existing         □ New           New         □ New           New         □ New	
□ Existing       □ Existing         □ New       □ New	
New         □ New           Existing         □ Existing           New         □ New           Existing         □ New           New         □ Existing           New         □ New           New         □ New	
□ Existing         □ New           □ Existing         □ Existing           □ New         □ Existing           □ Existing         □ Existing           □ New         □ New	
New         □ New           Existing         □ Existing           New         □ New           Existing         □ Existing           New         □ New           Existing         □ New           New         □ Existing           New         □ New           New         □ New	
☐ Existing         ☐ Existing           ☐ New         ☐ Existing           ☐ Existing         ☐ Existing           ☐ New         ☐ New           ☐ Existing         ☐ New           ☐ Existing         ☐ Existing           ☐ New         ☐ New	
New         □ New           Existing         □ Existing           New         □ New           Existing         □ Existing           New         □ New           New         □ New	
☐ Existing         ☐ Existing           ☐ New         ☐ New           ☐ Existing         ☐ Existing           ☐ New         ☐ New	1
New         □ New           □ Existing         □ Existing           □ New         □ New	
Existing New Existing New	
☐ New ☐ New	
Existing Existing	
□ New     □ New	
Existing Existing	
□ New     □ New	
Existing Existing	
□ New □ New	
Existing Existing	
□ New     □ New	
Column	
Total	
1000	
Total – All Sources	
If requested total allocation is less than "Total – All Sources" above, indicate	
total requested allocation	
	ŀ

If any of the above wells are replacements, provide well designation and reason for replacement:

### **WATER SOURCES**

# 8a. Groundwater Withdrawal Wells:

	Well ID	Latitude/ Longitude (DDMMSS.S) (all positive values)	State County Municipality (separate w/commas)	Aquifer Name	Date Drilled m/d/yyyy	Well Head Elevation (ft above msl)	Well Depth (ft)	Casing Depth (ft)	Screene d Interval (ft to ft)	Pumping Test Completed (yes or no)	Safe Yield¹ (gpm)	Specific Capacity (gpm/ft)	Existing Pump Capacity (gpm)	Pump Intake Setting (feet)
Existing New		o , , , , , ,												
Existing New		0 1 11												
Existing New		o , , , , , ,												
Existing New		o , , , , , ,												
Existing New		o , , , , , ,												
Existing New		o , , , , , ,												
Existing New		0 / "												
Existing New		0 / "												
Existing New		0 / "												
Existing New		o , , , , , , , , , , , , , , , , , , ,												
Existing New		o , , , , , , , , , , , , , , , , , , ,												
Existing New		o , , , , , , , , , , , , , , , , , , ,												
Existing New		o , , , , , , , , , , , , , , , , , , ,												
Existing New		o , , , , , , , , , , , , , , , , , , ,												
Existing New		0 / //												

Notes: (1) – attach method of computation or attach copy of pumping test data. Pumping test data required for any new wells.

# 8b. Surface Water Withdrawals – rivers, streams, creeks, springs, and brooks

	Intake ID	Point of Taking Latitude/ Longitude (DDMMSS.S) (all positive values)	State County Municipality (separate w/ commas)	Name of Surface Water Body	State Stream Classification <sup>4</sup>	Drainage Area at Intake (square miles)	Nearest USGS gaging station ID	Q <sub>7-10</sub> <sup>1</sup> At point of taking (cfs)	ADF <sup>2</sup> At point of taking (cfs)	Current Passby Requirement (cfs)	Date Intake Constructed (m/d/yyyy)	Pump Capacity <sup>3</sup> (gpm)
Existing New		0 1 11										
Existing New		0 / "										
Existing New		0 / //										
Existing New		0 1 11										
Existing New		0 / //										
Existing New		0 1 11										
Existing New		0 1 11										
Existing New		0 1 11										
Existing New		0 1 11										
Existing New		0 1 11										
Existing New		0 1 11										

<sup>&</sup>lt;sup>1</sup> Q<sub>7-10</sub>: A statistical estimate of the lowest average flow during a consecutive 7-day period with an average recurrence interval of 10 years (provide method of computation including the gage name, USGS identification, location and the period of record).

Pennsylvania:EV, HQ, CWF, WWF, MF, TSFNew Jersey:FW1, FW2, PL, TP, TM, NT, SE, SCNew York:A, AA, A-S, AA-S, B, C, D, T, TSDelaware:ERES, CWF, SALW, FALW

<sup>&</sup>lt;sup>2</sup> ADF: Average daily flow of the stream at the point of withdrawal – include period of record and gage information used in calculation.

<sup>&</sup>lt;sup>3</sup> If gravity-fed, give maximum hydraulic capacity and label as such.

<sup>&</sup>lt;sup>4</sup> Stream Classifica⊠on Codes

### 8c. Surface water withdrawals – ponds, lakes, intake dams, reservoirs, and storage dams:

	Intake ID	Point of Taking Latitude/ Longitude (DDMMSS.S)	State County Municipality	Name of Surface Water Body	State Stream Classificati on <sup>4</sup>	Drainage Area at Intake (square miles)	Impoundment Storage Capacity (mg)	Q <sub>7-10</sub> <sup>1</sup> At point of taking (cfs)	ADF <sup>2</sup> At point of taking (cfs)	Current Conservation Release Requirement (cfs)	Release Works (yes/no)	Safe Yield (cfs)	Date Intake Constructe d (m/d/yyyy)	Pump Capacity <sup>3</sup> (gpm)
Existing New		0 1 11												
Existing New		0 / "												
Existing New		0 / //												
Existing New		0 1 11												
Existing New		0 1 11												
Existing New		0 1 11												
Existing New		0 1 11												
Existing New		0 1 11												
Existing New		0 1 "												
Existing New		0 1 11												
Existing New		0 1 11												

<sup>&</sup>lt;sup>1</sup> Q<sub>7-10</sub>: A statistical estimate of the lowest average flow during a consecutive 7-day period with an average recurrence interval of 10 years (provide method of computation including the gage name, USGS identification, location and the period of record). If facility is a pond, lake, or impoundment provide the method and supporting calculations for determining the Safe Yield of storage.

Pennsylvania:EV, HQ, CWF, WWF, MF, TSFNew Jersey:FW1, FW2, PL, TP, TM, NT, SE, SCNew York:A, AA, A-S, AA-S, B, C, D, T, TS

<sup>&</sup>lt;sup>2</sup> ADF: Average daily flow of the stream at the point of withdrawal – include period of record and gage information used in calculation

<sup>&</sup>lt;sup>3</sup> If gravity-fed, give maximum hydraulic capacity and label as such.

<sup>&</sup>lt;sup>4</sup> Stream Classification Codes

8d. Source Metering, Recording and Reporting (Resolution No. 86-12, amended by Resolution No. 2001-8)

All water source withdrawals shall be metered in accordance with the above Resolutions and reported to the designated state agency.

Include with the application the following for each water supply source:

- Meter type/method.
- Meter reading and recording procedure.
- Meter calibration, maintenance and replacement schedule.
- Provide affirmation that water use is being reported to the designated state agency.
- 8e. Existing and/or New Interconnections and Their Capacities (Use zeros if not applicable. Please tab to or select another field before moving out of table to ensure proper calculation):

	Indicate if interconnection is		Bulk Pւ	ırchase	Bulk	Sale
Name of Interconnecting Purveyor	New or if existing used on Regular <sup>1</sup> , Auxiliary <sup>2</sup> or Emergency <sup>3</sup> Basis	ed on Regular <sup>1</sup> , Capacity (mgd) <sup>4</sup> Auxiliary <sup>2</sup> or		Monthly Maximum <sup>4</sup> Use (mg)	Annual Average Use <sup>4</sup> (mgd)	Monthly Maximum⁴ Use (mg)
Totals	'					

<sup>&</sup>lt;sup>1</sup> Regular Interconnection- An interconnection with another independent water system that is used on a daily basis.

<sup>&</sup>lt;sup>2</sup> Auxiliary Interconnection- An interconnection with another independent water system that is used seasonally or during periods of increased peak demand.

<sup>&</sup>lt;sup>3</sup> Emergency Interconnection- An interconnection with another independent water system that is used only during emergencies such as during repairs/maintenance, source contamination, pump failures, fire fighting, etc.

<sup>&</sup>lt;sup>4</sup>Use zeros if not applicable.

**If no interconnections exist**, discuss the feasibility of interconnecting project system with other distribution systems or any other water source (such as in the case of irrigation of golf courses, the use of WWTP effluent. Type below.

# 8f. Import/Export (Use zeros if not applicable. Please tab to or select another field before moving out of table to ensure proper calculation):

Well or Intake Designation	Basin (Atlantic, Delaware River, Susquehanna River etc.)	Amount Being Imported into the Delaware River Basin <sup>1</sup> (mgd)	Amount Being Exported from the Delaware River Basin <sup>1</sup> (mgd)	Purpose of Withdrawal
То	tals			

<sup>&</sup>lt;sup>1</sup> Use zeros if not applicable.

The diversion or transfer of water from (exportation) or to (importation) the DRB, whenever the design capacity of such transfer is an average daily rate of 100,000 gallons, is subject to the review and approval of the Commission. All projects involving such transfers must be submitted to the Commission for review and determination under Section 3.8 of the *Compact*, and inclusion within the *Comprehensive Plan*. If the export/import is from/to a facility located in Susquehanna River Basin (SRB), please provide the docket number and date of approval by the Susquehanna River Basin Commission. The applicant shall address the items listed below and submit with this application.

- A. Efforts to first develop or use and conserve the resources outside of the Delaware River Basin.
- B. Water resource impacts of each alternative available including the "no project" alternative.
- C. Economic and social impacts of the importation or exportation and each of the available alternatives including the "no project" alternative.
- D. Amount, timing and duration of the proposed transfer and its relationship to passing flow requirements and other hydrologic conditions in the Basin, and impact on in stream uses and downstream waste assimilation capacity.
- E. Benefits that may accrue to the Delaware River Basin as a result of the proposed transfer.
- F. Volume of the transfer and its relationship to other specified actions or Resolutions by the Commission.
- G. Volume of the transfer and the relationship of that quantity to all other diversions.
- H. Any other significant benefit or impairment which might be incurred to the Delaware River Basin because of the proposed transfer.

# **WATER/WASTEWATER TREATMENT**

9.	<b>Method of Treatment (all applicants):</b> Will the wa to use? Yes No. If yes, describe below:	ter withdrawn recei	ve any treatment prior
10.	Water Treatment Plant Information: If raw water prior to entering the distribution system, please pro	•	•
	Name or Owner of Treatment Plant:		_
	NPDES Permit No. for Discharge of Backwasl	า:	
	DRBC Docket No. for Discharge of Backwash	:	_
	Location:		
	City:	State:	Zip:
	Hydraulic Design Capacity: mgd		
11.	Wastewater disposal information:		
	<ul> <li>a. Describe the method of treatment and dispos area:</li> </ul>	al of wastewater fro	om the project service
	Conveyed to a treatment plant On-lot se	ptic system Othe	er:
	b. If wastewater is discharged to a treatment plant	, please provide:	
	Treatment Plant 1:		
	Name or Owner:		
	NPDES Permit No.:		
	DRBC Docket No.:		
	Location:		
	City:	State:	Zip:
	Hydraulic Design Capacity: n	ngd	
	Treatment Plant 2:		
	Name or Owner:		
	NPDES Permit No.:		
	DRBC Docket No. <u>:</u>		
	Location:		
	City:	State:	Zip:
	Hydraulic Design Capacity: n	ngd	

#### **ADDITIONAL INFORMATION**

#### 12. Prior or pending state or federal permits:

Type of State Permit(s) Required for Project	Status <sup>1</sup>	Agency	Issue Date (m/d/yyyy)	Permit Number

<sup>&</sup>lt;sup>1</sup> If not applicable, list (NA); if approved, (A); if pending, (P); if required but not applied for, (R).

Attach a copy of the application submitted to the appropriate state agency (if applicable), or if wells/intakes have already been approved by the state, copy of permit for new wells/intakes from the appropriate state agency

- **13.** <u>Location Map:</u> All applicants must attach a map (preferably USGS Quadrangle) which indicates the location of all new and existing project water sources, including wells, surface water intakes and interconnections.
- 14. <u>Flood Plain Map:</u> All applicants must submit a site map showing the locations of the 100-year flood plain and floodway boundaries (as indicated by the Flood Insurance Study for the project municipality) in relation to all structures (wells, pump houses, and water treatment facilities). If a Flood Insurance Study has not been completed for the project municipality, supply a copy of the Official Flood Hazard Boundary Map of the site and indicate the locations of all structures (For more information see the Commission's Flood Plain Regulations).

**Note:** Neither the pump house, water treatment facilities, well, nor ancillary equipment may be located within the 100-year floodway. If the pump house is located in the flood fringe area, submit a drawing indicating that the pump house floor and all critical equipment are located at least one foot above the 100-year flood elevation, or flood-proofed to that elevation.

15. Wetlands Map and Certification: All applicants must identify all wetlands that may be impacted by the project on a map. Wetlands are defined in the Commission's Water Code (Section 2.350.1) as those areas which are inundated by surface or ground water with a frequency sufficient to support a prevalence of vegetative or aquatic life that requires saturated soil conditions for growth and reproduction or are delineated as wetlands by a signatory state. It is the policy of the Commission to support the preservation and protection of wetlands in accordance with Section 2.350.2 of the Water Code. Each application shall include a signed statement that the project is or is not located within a wetland as defined by

applicable state and federal regulations.

Information on determining the presence or absence of wetlands can be obtained from the Army Corps of Engineers Philadelphia District Regulatory Branch:

http://www.nap.usace.army.mil/cenap-op/regulatory/wetlands\_guidance.html

- 16. Drought Management and Contingency Plan: (All projects with a total system water withdrawal in excess of 1.0 mgd or any withdrawal project in the Southeastern Pennsylvania GWPA.) A drought management and contingency plan shall be prepared by each person, firm, corporation or other entity withdrawing groundwater or surface water for purposes of municipal or public, industrial, or commercial water supply. The plan shall provide the necessary actions the applicant will execute to reduce demand and assure water supplies to priority uses during a declared drought emergency. The plan will include emergency water conservation measures and identify potential water use restrictions the applicant will implement to achieve a reduction in a small percentage of their normal water use. Such plans shall be filed with this application.
- 17. Non-Point Source Pollution Control Plan (NPSPCP): (All projects with sources or service area within the drainage area of Special Protection Waters.) The applicant shall provide a description of how the proposed project controls the new or increased non-point source loads generated within the portion of the project's service area which is also located within the drainage area of SPW. In general, a NPSPCP shall consist of an Erosion and Sediment Control Plan (ESCP) and a Post Construction Stormwater Management Plan (PCSMP).

A NPSPCP submitted for DRBC approval must include:

- 1) an approved ESCP usually by the County Soil/Conservation District;
- 2) a PCSMP signed and sealed by a licensed professional Engineer or Geologist;
- 3) a letter by the licensed professional stating that the NPSPCP meets the requirements of an approvable NPSPCP as described below; and
- 4) a written narrative describing the steep slope, riparian buffer, floodplain and redevelopment (if applicable) design criteria being utilized in the site design.

For each of the SPW states, a NPSPCP will be deemed acceptable if:

#### **Pennsylvania**: a project is designed in accordance with:

- 1) PADEP's Erosion and Sediment Pollution Control Program Manual (March 2000), and
- 2) PADEP's draft Pennsylvania Model Stormwater Management Ordinance (2006), and
- 3) PADEP's Pennsylvania Stormwater Best Management Practices Manual (December 2006).

#### **New Jersey**: a project is designed in accordance with:

- 1) NJ State Soil Conservation Committee's Standards for Soil Erosion and Sediment Control in New Jersey (July 1999), and
- 2) New Jersey Stormwater Best Management Practices Manual Appendix D Model

Stormwater Control Ordinance for Municipalities (April 2004).

**New York**: a project is designed in accordance with:

- New York State Standards and Specifications for Erosion and Sediment Control (August 2005), published by the Empire State Chapter of the Soil and Water Conservation Society, <u>and</u>
- 2) a Stormwater Pollution Prevention Plan (SWPPP) which includes the water quality and water quantity controls in accordance with the New York State Stormwater Management Design Manual (August 2003).
- **18.** Indicate the total available water system storage: \_\_\_\_mg, days supply.
- **19.** Aquifer Testing and Hydrogeologic Report. For all new wells, submit a Hydrogeologic Report detailing extended aquifer pumping test procedures, monitoring, results and analyses.

DRBC requires that the results of a pumping test be submitted as part of the Groundwater Withdrawal Application involving new groundwater sources or projects involving the increase in a previously approved allocation. DRBC's authority is found in Delaware River Basin Compact and Section 2.20 of the DRBC Water Code (incorporated by reference in 18 CFR PART410) relating to the preservation and protection of underground waters.

The Commission's member states have developed Aquifer Testing Guidance protocols that the Commission will rely upon when reviewing applications involving new groundwater sources. DRBC urges all applicants to follow these procedures when applying to the Commission for approval of a new groundwater source. Failure to do so may result in the rejection of the pumping test or require additional analysis.

For projects located in Pennsylvania, project sponsors should follow PADEP's Aquifer Testing Guidance for Public Water Systems (Document No. 394-2125-001), even if the groundwater source is not intended to be used as a public supply. However, certain items related solely to public water sources, i.e. new source sampling, wellhead protection areas, etc. may be omitted if the new groundwater source will not be utilized for public supply. While a predrilling plan or pumping test plan is not required to be submitted to the DRBC, staff recommend that a plan be submitted if the pumping test or hydrogeologic report will deviate from these procedures in a substantive way. Also, sources located in the Commission's Southeastern Pennsylvania Groundwater Protected Area (SEPA GWPA) are subject to additional requirements and require notice prior to drilling. Applicants are advised to contact Commission staff to discuss any pumping test projects that are located in the SEPA GWPA.

For projects located in New York, applicants should follow NYSDEC's Pumping Test Procedures for Withdrawal Applications (TOGS 3.2.1). Project sponsors are advised to submit aquifer testing plans to the Commission for review and approval prior to conducting a test, and must do so if the project sponsor proposed to deviate from the NYSDEC test procedures.

For projects located in New Jersey and Delaware, applicants should coordinate all aquifer testing with NJDEP and DNREC. Groundwater withdrawal projects in these states are regulated under the DRBC/NJDEP March 2015 Administrative Agreement and the Administrative Agreement between DRBC and the State of Delaware, Section IV.C.4, enacted on July 2010 and modified on May 8, 2013.

The Hydrogeologic Report must at a minimum, include a discussion of field procedures, a listing of all data gathered, an analysis of the data and an evaluation of the impact of the proposed withdrawal on the aquifer and on other groundwater and surface water users in the vicinity. All relevant data, including but not limited to a geologic map; well log; water level charts; and tables and graphs for the pumped well, monitoring wells, and nearby perennial streams, wetlands and other sensitive hydrologic features must be submitted. The pumping test may be of not less than 48 hours pumping duration unless otherwise approved in writing by the Executive Director or as a condition of the Commission's approval, at an uninterrupted, constant withdrawal rate of not less than the proposed pumping rate. Required information to be collected must include, but is not limited to the following:

- a. Date and time of all static, pumping, and recovery water level measurements.
- b. Record of pumping rate measured frequently throughout the test.
- c. Sufficient static water level measurements in all wells and at all monitoring points prior to start of pumping and following cessation of pumping to determine trends in water level changes.
- d. Pumping and recovery measurements in the pumped well and observation wells.
- e. Monitoring of wells sufficient to determine all possible interference.
- f. The final hydrogeologic report must include appropriate calculations using the collected data to determine: all relevant aquifer parameters, including without limitation, transmissivity, storage coefficients, hydraulic conductivity, specific yield, etc., and an extrapolated drawdown prediction at the tested rate in the pumping well and all affected wells over an assumed six-month period of no recharge.
- g. Groundwater discharge from the proposed production well during the pumping test must be directed an adequate distance from the pumping well, observation wells, and monitoring locations such that recirculation or artificial recharge does not occur. Recirculation and artificial recharge may invalidate the pumping test and may require retesting.
- h. Discharges of groundwater and groundwater laden with drill cuttings must be controlled in such a way as to prevent erosion and sediment pollution of waterways. The project sponsor must obtain any and all approvals required by state and local water management

agencies and soil conservation districts before conducting any drilling or aquifer pumping tests.

- i. Records of precipitation, measurements or observations of nearby stream flows, and weather conditions throughout the test.
- j. A map identifying all nearby water wells owned by others that could be affected by pumping of the new well(s) and the following information for each well if available.

Name of Owner:	Phone:
Address:	
Well No.:, Type of Use:	
Date Drilled: feet, Diameter: inches.	
Casing Type: feet inches, Casing Depth: feet.	
Well Screen Type: feet, Bottom of Screen: feet.	
Pump Type:	
Capacity: gpm, Intake Setting: feet.	
Describe location of well on property:	
Latitude: Longitude:	

#### **Water Purveyors Only:**

- **20.** <u>Service Area Map:</u> Enclose a service area map that includes a delineation of the existing service area and the proposed service area.
- **21**. <u>Water Quality Data:</u> Include chemical and bacterial analysis of the water from the new well(s).
- **Water Conservation Plan:** All purveyors seeking DRBC approval for a new or expanded water withdrawal must include a water conservation plan, addressing the following components:

#### Service Metering (No. 87-7 Revised, amended by Resolution No. 2001-8)

- Confirm all connections metered. If not, include schedule for 100% service metering.
- Meter types.
- Meter reading and recording procedure.

- Meter calibration, maintenance and replacement schedule.
- Water rate schedule (is billing based on metered usage?)
- \*Purveyor program to provide residential customers with information on
  - o savings available through water conservation;
  - o different methods of residential water conservation; and
  - o availability of water conservation devices.

#### Leak Detection & Repair (LD&R) (No. 87-6 Revised)

 <u>Completed</u> Plan or Executive Summary (Pennsylvania Applicants may substitute an LD&R Compliance Report)

#### Water Conservation Performance Standards (No. 88-2 Rev. No. 2)

- Status of municipal regulations in applicant's service area (Pennsylvania only).
- Adopted policy to certify or verify that "no new service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision No. 2)."

<u>Rationing Plan</u> – Describe the water rationing plan, including triggers and implementation schedules.

#### Water Audit Program (Resolution No. 2009-1)

- The owners of each water supply system serving the public with sources or service areas located in the Delaware River Basin shall implement an annual calendar year water audit program conforming to IWA/AWWA Water Audit Methodology (AWWA Water Loss Control Committee (WLCC) Water Audit Software) and corresponding AWWA guidance.
- "Non-revenue water" reported under section 2.50.3. (Reporting Requirements), subsection B.1.b.ii. of this Water Code shall be computed in accordance with IWA/AWWA Water Audit Methodology (AWWA) Water Loss Control Committee (WLCC) Water Audit Software) and corresponding AWWA guidance.

b. All purveyors withdrawing 1 million gallons per day or more shall also include the following:

#### Water Conservation (No. 81-9)

 Provision of information on the availability of water-conserving devices and procedures.

Retail Water Pricing (No. 92-2) (This requirement is waived if the purveyor either documents it has adopted a water conserving pricing structure or is in the process of

<sup>\*</sup>Recommended.

implementing such a pricing structure in accordance with a Commission schedule or a schedule established by the appropriate state public utilities commission.)

- An evaluation of the feasibility of implementing a water conservation pricing structure and billing program. The evaluation shall, at a minimum, consider:
  - The potential change in the quantity of water demanded for customer classes and their end uses of water during both peak and non-peak periods stemming from alternative water conservation pricing structures;
  - The potential revenue effects of the alternative pricing structures;
  - Any legal or institutional changes necessary or desirable to implement a water conservation pricing structure; and
  - How conservation pricing could be coordinated with other conservation programs and measures to reduce both average and peak water use.

#### **Golf Course Projects:**

23.	All applications involving golf course irrigation must include an operations plan that addresses
	the components contained in the Water Conservation Guidelines for Golf Courses, available
	on the Commission's website.

Additionally, the following information should be provided:

Total property acrease	e: acres.	Number of Holes:

Acreage to be irrigated (Use zeros if not applicable. Please tab to or select another field before moving out of table to ensure proper calculation):

Fairways	acres
Tees	acres
Greens	acres
Other <sup>1</sup>	acres
Total	acres

Describe method <sup>2</sup> for estimating irrigated acreage:
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<sup>&</sup>lt;sup>1</sup>Other includes any other irrigated area, for example rough surrounding fairways and greens.

<sup>&</sup>lt;sup>2</sup> The acreage to be irrigated must be an accurately represented area, and should reflect only those areas that are contained within the irrigation system.

**<sup>24.</sup>** Provide a diagram and description of the irrigation system, include all water sources, storage ponds, and meter locations.

# **Agricultural Projects:**

**25.** If the use is agricultural, provide a description of the type of crop and the Agricultural Extension Service water requirement recommendations:

Type of crop(s):

inches/year:

# **Groundwater Remediation Projects:**

**26.** If the withdrawal is part of a groundwater remediation project, submit copies of any engineering studies on the nature and extent of the contamination and the remediation program.

#### **END OF APPLICATION**