

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATERSHED MANAGEMENT
DIVISION OF WATER USE PLANNING**

DOCUMENT NUMBER: 392-2130-001

TITLE: General Policy and Procedure for the Review of Water Allocation Permit Applications

EFFECTIVE DATE: February 21, 1992

AUTHORITY: Water Rights Act of June 24, 1939, P.L. 842, No. 365, as amended, 32 P.S., 631 *et seq.*

POLICY: The Department will follow a department-wide, standard process for reviewing applications for surface water allocation permits.

PURPOSE: The general policy and procedure provides an understanding of the purpose and timeframes involved and the various factors considered by the Department in the review of an application for a surface water allocation permit.

APPLICABILITY: This policy applies to all applications for surface water allocations submitted by a public water supply agency, both for direct withdrawal of surface waters and for purchase of surface waters from another public water supply agency.

DISCLAIMER: The policies and procedures outlined in this guidance document are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of the Department to give these rules that weight or deference. This document establishes the framework, within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

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TECHNICAL GUIDANCE:

Review of Application for Completeness

Upon receipt of an application, the Department will review it for completeness and accuracy of the information provided. The Department will accept an application if all items in the application have been completed and necessary or required documentation is provided. Generally, if any item is incomplete or if the necessary or required documentation has not been provided, the Department will return the application to the applicant. In either case, at this time the Department will also inform the applicant of any potential problems or inconsistencies discovered in the completeness review.

Transmittal of Application for Review

Once the Department has determined that an application can be accepted for review, necessary documents will be prepared for the transmittal of the application form and pertinent documentation to review agencies. For applications involving the direct withdrawal of water from a stream, the Department will forward copies of the application to the appropriate Departmental Regional Office serving the county of the applicant's main service area. The Regional Office will be asked to have representatives of the Bureau of Water Supply and Community Health and Bureau of Water Quality Management review the application for any potential adverse impacts related to their respective program areas which may result from the requested allocation. The Bureau of Water Supply and Community Health is responsible for the approval of a source for public water supply use and for the permitting of the actual facilities used in the operation of the water system; these permits are for approval of the source from a quality standpoint only, to insure compliance with the Safe Drinking Water regulations. The Bureau of Water Quality Management is responsible for determining if the withdrawal will result in any adverse water quality impacts downstream of the proposed taking point. They also review the application to determine if there are any potential adverse water quality impacts at the point-of-discharge of the water that has been delivered for use in the water supply system. Other agencies contacted for comments include the Department's Bureau of Dams, Waterways and Wetlands Management, the Pennsylvania Fish and Boat Commission, the Department's Bureau of Forestry (if the project is located on state forest land), the Pennsylvania Game Commission (if the project is located on state game lands), the appropriate county and/or regional planning commission, the respective river basin commission (if the project is located in either the Delaware, Susquehanna or Potomac River basins), the Army Corps of Engineers (if the project is located on a stream they consider navigable), any downstream water users that have been identified in the application, and any other persons who the Department determines may have an interest in the application. Notice of the application is published in the Pennsylvania Bulletin and the general public is given a 15-day comment period in which to file a statement either for or against the proposed withdrawal.

For applications for subsidiary water allocation permits, only the Department's Regional Office, the appropriate county and/or regional planning commission, the respective basin commission, and the water supplier providing the water supply will be contacted for comments. The water supplier providing the water supply will be informed that the allocation to be granted will be offset in its allocation and no new allocation will be granted to the supplier without application. Notice will also appear in the Pennsylvania Bulletin.

While the application is in the comment period, the Department will conduct a preliminary review of data to determine any potential problems or inconsistencies in the data provided. Any comments received which are adverse or express concerns which the Department should investigate will be included in the analysis of the application. Not all comments received by the Department are within the purview of the Department's determination on a water allocation permit application. For instance, if an applicant has proposed a particular source of water supply and the Department has received no adverse comments and can foresee no adverse environmental impacts which may result from the requested allocation, the Department will generally not require studies of possible alternative sources.

Application Review Procedures

Section 7 of the Water Rights Act of June 24, 1939 outlines the duties of the Department to investigate water allocation requests, consider conflicts of interest, and to give approval. Approval of the requested allocation is given where it is determined that the:

1. Proposed new source of supply will not conflict with the water rights held by any other public water supply agency;
2. Water and water rights proposed are reasonably necessary for the present purposes and future needs of the public water supplier making application;
3. Taking of said water or exercise of water rights will not interfere with navigation;
4. Taking of said water or exercise of water rights will not interfere with public safety; and
5. Taking of said water or exercise of water rights will not cause substantial injury to the Commonwealth.

In cases of apparent conflicts of interest, the Department's investigation considers the extent of conservation development and use of the existing sources of water to the best advantage. All reviews include these determinations in addition to examination of any other areas that may be of concern.

Population and Water Use

In determining the present and projected needs, the Department will review population projections and historical water use. The population projections provided by the applicant will be reviewed to determine if they are reasonable and consistent with the Department's own projections. The Department maintains statewide municipal population projections spanning 50 years into the future, which are used in the Department's water quality and water quantity planning and management programs. Where there are inconsistencies, the applicant will be required to demonstrate why its population projections are more appropriate. Such justification may be special knowledge of anticipated growth in a particular area, or other factors. In determining the percent of the municipality served, the Department will determine if any other public water supply agency provides service to the municipality, and the likelihood of the applicant extending service to the specified percentage of the municipality. Generally, a table will be prepared within the report, showing a comparison between the Department's and applicant's projections. In cases where there is little difference in the total allocation needed (less than 5 percent or 0.5 mgd, whichever is less), the Department may accept the applicant's projections.

The water use of the applicant will be reviewed to determine if there has been a consistent increase in total water use over the last ten years and to determine if it is reasonable, based on the system and its customer mix. Any discrepancies between the data provided in the application and data contained in the company's Annual Water Supply Reports that are filed yearly with the Department will be reviewed and corrections or clarifications will be requested as appropriate. The Department will discuss the resolution of any discrepancies. The Department will review the applicant's average daily water use, peak day water use, and the peak to average ratio. Any inconsistencies in the data will be reviewed to determine the cause of the inconsistency.

The water use of the applicant will be analyzed by customer classification. Part of the analysis will include a review of the total system per capita daily usage and the residential per capita daily use. Residential per capita usage greater than 70 gallons per capita per day (gpcd) will be reviewed to determine the reason for the high per capita use. Any special cases such as large industrial use or resales to bulk water supply agencies or unusually high systemwide gpcd's will be reviewed as appropriate. This data will also be reviewed for discrepancies with the Annual Water Supply Reports provided to the Department.

Once the residential and total system gpcd's have been computed, they will be used along with the population projections to determine reasonable needs of the applicant within the projected future (generally a twenty- to thirty-year period). The report will contain a comparison between the applicant's projections and the Department's projections for 10-, 20-, and 30-year periods, if appropriate.

If an applicant has a high percentage of unaccounted-for water, an explanation of the reason for the high unaccounted-for water will be requested. If it appears that it is due to extreme levels of leakage and loss, the applicant may be given a water allocation of a given magnitude conditioned upon correcting the problem within a given timeframe. Usually, the allocation after 5 years may be reduced to a future need for the remainder of the permit with consideration of a maximum of 20 percent unaccounted-for water use allowance.

Applications for subsidiary allocation, in addition to the regular review, will require the review, if appropriate, of the supplying water supplier's water allocation permit. The seller's permit will be reviewed to determine the amount granted, the period considered in granting the allocation, the remaining life of the allocation permit, the area considered to be served by the seller at the time the application was filed, and the present area served. An analysis will be conducted to determine whether granting the allocation would cause the supplier to exceed its allocation. In cases where there are problems identified, the seller and applicant will be informed of the problem.

The water use of the applicant will also be reviewed for water conservation possibilities. Applicants for water allocation whose total average daily withdrawal is greater than 1.0 million gallons per day (mgd) in the Delaware River Basin have specific requirements with respect to water conservation programs. All applicants for water allocation in the Susquehanna River Basin have water conservation requirements. The applicant's water conservation programs will be reviewed to determine compliance with the Delaware River Basin Commission's Resolution No. 81-9 and the Susquehanna River Basin Commission's Water Conservation Policy and Standards contained in Section 803.63 of their Regulations and Procedures for the Review of Projects, if appropriate.

If the applicant's customer connections are unmetered, the Department may require the adoption and implementation of a plan to meter the unmetered connections. Applicants in the Delaware River Basin that serve or will serve more than 250 customer connections or supply water in excess of 100,000 gallons per day (gpd) will be required to demonstrate that a program is in place for metering all new connections in compliance with the Delaware River Basin Commission's Resolution No. 73-1.

Water Supply

Applicants for a new source of supply or increased allocation may be required to explain what other alternatives were considered and why the alternative chosen is preferred. Any serious discrepancies in the hydrological analysis will be reconciled.

The capacity of the applicant's water supply sources will be reviewed to determine the supply of water available to the applicant during drought periods. Reservoir yield analysis will generally be based upon the procedures described in the Department's Bulletin No. 7 - Long Duration Low Flow. The safe yield of the reservoir will be evaluated to determine the capability of providing a conservation release. Generally, if no release is presently required, a release may be calculated based upon the State Water Plan - Planning Principles formula, modified to consider the amount of allocation requested and the storage required to support it. The release will be calculated based on the storage required to support the allocation and release. This method is referred to as the draft rate method for calculating releases. If the stream is a Special Protection water, the Department will require seasonal conservation releases. If there is an existing release requirement, the Department will determine the ability of the reservoir to provide for the existing release requirement and, if appropriate, may adjust the amount of release. The reservoir yield analysis will also include any potential changes in available storage as a result of dam safety requirements.

The yield of a river intake will generally be reviewed based upon an appropriate reference gage which provides for the analysis of the Q_{7-10} and Q_{7-50} low flow. If there are miscellaneous measurements at a nearby gaging station which may be correlated to a long-term reference gaging station, the Department will attempt to review the

application based upon a regression analysis of this data. Generally, a passby flow requirement at least equal to the Q_{7-10} flow at the intake will be required. The draft rate method will be used to determine the appropriate level of passby flow. The report will contain a discussion of the passby flow and the reasons and methods for its determination.

It should be noted that conservation releases and passby flows are also determined in consultation with the Pennsylvania Fish and Boat Commission.

Springs are reviewed to determine the yield capability of the spring. The applicant's other sources will also be included in the review to determine the total system supply capability. The other sources may include wells and interconnections. Interconnections will be reviewed to determine if a subsidiary water allocation permit is required and to determine the actual contractual and hydraulic limitations on the transfer of water.

Generally, springs and river intake allocations will be based upon a maximum daily withdrawal. Reservoir allocations will be based upon an average daily withdrawal, unless the reservoir is so small that it is essentially a river intake. In some instances, the Department may impose a maximum daily withdrawal limit on reservoirs. No specific criteria has been developed for determining the maximum daily withdrawal to be permitted from reservoirs; however, it will generally not be greater than average daily flow at the reservoir site with consideration for the critical duration of drawdown on the reservoir. Where the permitted withdrawals from each of the applicant's sources will exceed the actual needs of the water supply system, the Department will consider the imposition of average daily and/or maximum daily withdrawal limits.

The Department's Bureau of Water Supply and Community Health - Drinking Water Management Division will be requested to make a determination of the potability of a proposed new source of water supply. No new source of surface water supply will receive an allocation unless the applicant has provided sufficient information to the Bureau for a determination of potability with or without specific treatment requirements.

Treated water storage will be reviewed to determine its adequacy. An applicant will be expected to have minimum treated water storage equal to an average day's demand unless sufficient raw water storage exists to offset the deficiency.

Intrabasin and interbasin transfer analysis will be conducted to determine the location of the return flows and any instream needs and downstream requirements below the withdrawal and/or discharge points. The Department will rely on information contained in the application and any comments received from its Bureau of Water Quality Management, the Pennsylvania Fish and Boat Commission, or other interested parties for the determination of any impacts on downstream water users or instream needs.

If, during the review of the water supply sources, it is determined that all combined sources of supply to the system (surface water and ground water) are inadequate to meet current average daily and/or peak daily demand, the Department will require the initiation of a study by the applicant to find and develop additional sources of supply. If it is determined that the sources are inadequate to meet future average and/or peak daily demands, the applicant will be advised of the potential problem.

Although a strict mathematical interpretation between population and water use may indicate a particular level of need by the applicant, the Department reserves the right to determine a specific level of allocation to be granted to the applicant. In cases where insufficient data exists to make a determination and the applicant and/or consultant have provided the best available information, the Department reserves the right to make the best technical judgment of withdrawals, use or need in the applicant's system.

The life of water allocation permits will generally be for a period of 25 years, unless there are circumstances in a particular permit application which require issuing a permit for a shorter period of time. Subsidiary water allocation permit life will generally be tied to the life of the contract between the seller and purchaser of water, but in no event will it be greater than the life of the water allocation permit held by the seller for the surface water

sources. In cases where contracts have a specified life but contain extension clauses by mutual agreement of the parties, the permit will generally be written for the life of the seller's water allocation permit.

It should be noted, that while this document uses the term "subsidiary permit" or "subsidiary water allocation permit," the 1939 Water Rights Act which established a surface withdrawal permitting program for public water suppliers in Pennsylvania contains no specific reference to subsidiary rights or permits. The term is used solely to distinguish those permits which are issued for the right to purchase waters from another supplier whose sources include surface waters for which that other supplier is required to hold a surface water allocation permit. A subsidiary permit is such in nomenclature only and in fact is identical in language, form and effect to a permit issued to a supplier for rights to withdraw water directly from surface sources.

Applications for subsidiary permit will not be approved prior to a decision on any pending application by the seller, unless a sufficient valid allocation already exists for the seller, which would allow issuance of the permit. In other words, subsidiary rights cannot be granted unless a valid right exists at the point of withdrawal.

Note: As of August 31, 1992, the Department has implemented Phase II of its reorganization plan. In addition to name changes of various bureaus and the transfer of various programs among the bureaus, the water allocation program is being decentralized to the Department's Regional Offices. It is expected that processing of all water allocation permits will be handled by the Regional Offices on or after January 1, 1993, with oversight review being conducted by central office staff.