

DATE: September 8, 2006

TO: Office of Drinking Water Staff

THROUGH: J. Wesley Kleene, Ph.D., P.E., Director
Office of Drinking Water

FROM: Steve Pellei, P.E., Director
Division of Technical Services

SUBJECT: PERMITS & PROJECT REVIEW – Policy for Issuing Operation Permits

DELETE: WM 853 (Policy for Permitting Waterworks)

RELATED: WM 730 (Exclusion from Regulation-Manufactured Home Parks),
WM 784 (Permit Application Process),
~~WM 885 (Procedure for Issuing Operation Permits)~~

SUMMARY STATEMENT:

This memo clarifies ODW authority and policy for issuing waterworks Operation Permits. Clarification is provided with respect to the subclassifications of nontransient noncommunity or transient noncommunity water systems. This memo also provides policy guidance on reliability requirements, grandparented waterworks, permit exemptions and variances.

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I. DEFINITIONS

A. Waterworks:

Va. Code §32.1-167 and §12 VAC 5-590-10 of the *Regulations* state “*Waterworks*’ means a system that serves piped water for drinking or domestic use to (i) the public, (ii) at least fifteen connections, or (iii) an average of twenty-five individuals for at least sixty days out of the year. The term ‘waterworks’ shall include all structures, equipment, and appurtenances used in the storage, collection, purification, treatment, and distribution of pure water except the piping and fixtures inside the building where such water is delivered.”¹

Code Exemptions. The *Va. Code* § 32.1-168 provides for the following exemptions: The provisions of article §32.1-167 shall not be applicable to a waterworks which meets all of the following conditions:

1. The waterworks consists only of distribution and storage facilities and does not have any collection or treatment facilities;
2. The waterworks obtains all of its water from, but is not owned or operated by, a waterworks to which this article is applicable;
3. The waterworks does not sell water to any person; and
4. The waterworks is not a carrier which conveys passengers in interstate commerce.

Excluded Facilities.

In addition, ODW has intentionally excluded from regulation the following facilities that are connected to a primary waterworks:

1. Mobile home parks with meters at service connections. See WM 730.
2. Apartment/condo complexes which sub-meter individual units if the local utility charges the residents directly, or if water usage is included as part of the monthly rent or fees².
3. Hotels (and like institutions) connected to a waterworks that provide ancillary water conditioning for aesthetic purposes.

B. Drinking Water:

“Drinking water” is water that is made available for drinking purposes. Drinking water does NOT include iced tea, coffee, or any other drinks made by mixing with water, ice, water processed through machines (vending machines), or foods that contain water. These are considered food products and not drinking water and therefore may be addressed by other applicable regulations and agencies.

C. Serves the Public:

“Serves the Public” means that the owner of an establishment, facility, or other entity provides the means by which the public, including employees, may obtain water for drinking. This would include the use of drinking fountains, water dispensed at soda machines, providing cups of water upon request, or providing cups adjacent to a faucet for obtaining water for human consumption. A waterworks that serves the public is a subset of noncommunity waterworks.

¹ Physically separated systems (no interconnections) are to be evaluated individually as to whether they meet the definition criteria of a waterworks.

² According to EPA Guidance Memorandum WSG 118, dated March 13, 1998.

D. Grandparented

Grandparenting is the practice of carrying a pre-existing condition into a new regulatory framework. With respect to Operation Permits, grandparenting means issuing an operating Permit to a waterworks with pre-existing conditions that may not comply with Part III (Manual of Practice for Waterworks Design) and IV (Exceptions to Manual of Practice for Noncommunity Waterworks) of the current *Waterworks Regulations*.

E. Reliability:

“Reliability” means that a waterworks is able to demonstrate their ability to provide pure water of adequate quantity and quality. In accordance with §12 VAC 5-590-490B of the *Regulations*, all waterworks shall provide adequate treatment and pure water. Additionally, the owner shall assure a high degree of capability and reliability in accordance with §12 VAC5-590-360 A which states:

“The [waterworks owner] shall provide and maintain conditions through the entirety of the water supply system in a manner which will assure a high degree of capability and reliability to effect compliance with these standards. This requirement shall pertain to the source of supply, treatment, transmission, storage, and distribution facilities and the operation thereof. In addition, this requirement shall include specific and continuing assessment of the capability, effectiveness, and reliability of the treatment process in relation to potential contaminants in the source of supply. Finally, this requirement shall include the identification and evaluation of all factors having potential for impairing the quality of the water as delivered to customers and appropriate preventive and control measures.”

F. Pure Water

"Pure water" means water fit for human consumption and domestic use which is sanitary and normally free of minerals, organic substances, and toxic agents in excess of reasonable amounts for domestic usage in the area served and normally adequate in quantity and quality for the minimum health requirements of the persons served. (*Va. Code* §32.1-167, Chapter 5A, Article 2).

G. Domestic use or usage

"Domestic use or usage" means normal family or household use, including drinking, laundering, bathing, cooking, heating, cleaning, and flushing toilets. (*Va. Code* §32.1-167, Chapter 5A, Article 2).

H. Year-round Resident (Residential Consumer)

“Year-round Resident (or Residential Consumer)” means an individual whose primary residence is served by the water system. The individual need not live at the residence for 365 day a year for it to be considered his/her year-round residence.³

³ This definition comes from the August 21, 1991 EPA memo titled “Definitions of Types of Public Water Systems and Populations Served by Those Systems” found at www.epa.gov/safewater/wsg/wsg_66a.pdf

I. Population Served

“Population Served” (for any type of system) means the number of residential consumers plus the average of the number of regular consumers served, per day, during a month plus the average of the number of transient consumers served, per day, during a month.⁴

II. WATERWORKS TYPES

These are the types of waterworks as defined by ODW policy:

- A. Community Waterworks (C) – means a waterworks which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. Refer to WM 865 for the definition of an ERC.
- B. Noncommunity Waterworks – means a waterworks that is not a community waterworks but operates at least 60 days out of the year. The 60 days out of the year do not have to be consecutive.
- C. Nontransient Noncommunity Waterworks (NTNC) – means a waterworks that is not a community waterworks and that regularly serves at least 25 of the same people over 6 months out of the year. Regularly serves means four or more hours per day, for four or more days per week for 26 or more weeks per year.⁵
- D. Transient Noncommunity Waterworks (TNC) – means a noncommunity water system that is not a nontransient noncommunity water system. These waterworks serve drinking water to at least twenty-five individuals (transient consumers) daily for at least sixty days out of the year. It is ODW policy to only permit transient noncommunity waterworks serving the public drinking water (domestic use intentionally excluded) with the public further defined as serving at least twenty-five individuals daily for at least sixty days out of the year. It is ODW policy to only permit systems serving churches or similar religious institutions if they have a permanent staff of at least twenty-five or have day care or school facilities or similar activities which serve at least twenty-five people.
- E. Consecutive waterworks- means a waterworks which has no water production or source facility of its own and which obtains all of its water from another permitted waterworks.

III. ODW’S AUTHORITY

ODW’s authority extends to any water system that meets the definition of a waterworks. This authority over waterworks is granted *by law* (*Va. Code §32.1-169 & 170*), and not by the possession of an Operation Permit. Therefore, once a system meets the definition of a waterworks they are subject to the *Va. Code §32.1-167 et. seq.*, the *Regulations*, and ODW authority (see *12 VAC 5-590-20 through 40*); regardless of whether they have been issued an

⁴ Ibid

⁵ This definition comes from the August 21, 1991 EPA memo titled “Definitions of Types of Public Water Systems and Populations Served by Those Systems” found at www.epa.gov/safewater/wsg/wsg_66a.pdf

Operation Permit. ODW may conduct sanitary surveys and issue NOVs for systems that meet the definition of a waterworks but do not have an Operation Permit (this includes waterworks whose permit has been revoked but which continue to meet the definition of a waterworks).

ODW will extend its authority to those systems that have applied for a permit with the intention of becoming a waterworks. By applying to VDH for a construction permit, the water system owner is voluntarily submitting to, and accepting, regulation by VDH as a waterworks. If, at some later date, the water system still does not qualify as a waterworks under the regulatory definition and the owner challenges our authority⁶ to regulate the system, VDH can make the decision to revoke the permit and stop regulating the system as a waterworks.

The following describe ODW's policy regarding systems whose population or service connections do not clearly meet the definition of a waterworks.

A. Proposed Waterworks

ODW will issue the owner of a proposed water system a waterworks an Operation Permit when:

1. The owner has confirmed⁷ to ODW that the water system will eventually meet the definition of a waterworks (§12 VAC 5-590-10) and,
2. The owner has met the requirements of the construction and Operation Permit application process. (See WM 784).

ODW can initiate revocation of the waterworks Operation Permit for a proposed waterworks that does not meet the 15/25 criterion for a waterworks within 36 months of issuance of the Operation Permit. See Section V for permit revocation procedures. The waterworks shall be required to meet all of requirements of the Regulations until the permit revocation process has been completed. See Appendix A, Examples 1, 2, & 3.

B. Reduced Service Connections

ODW's policy is to strongly discourage owners from separating systems simply to avoid regulation as a waterworks.

1. System Breakups:

If a system has multiple sources, it can fall below the criteria used in defining a waterworks by removing physical interconnections between sources, such that one or more sources is directed to a discrete service zone of fewer than 15 connections and less than 25 individuals. The distribution piping for each service zone must be physically separated. The waterworks continues to meet the definition if there are any valved interconnections, even those intended for "emergency" purposes, since the use of these connections are too difficult to monitor to ensure the distribution systems

⁶ Indicates in writing that the service area does not meet the definition of a waterworks as planned, and requests that the operation permit be revoked

⁷ The Permit Application (WM784) has been revised to add such a statement.

actually remain separate. ODW will continue to regulate the waterworks until a physical separation can be confirmed⁸.

2. Permanent Reductions in Connections or Service Population:

Occasionally an owner reduces service for various reasons and requests a revocation of the waterworks Operation Permit. Simply shutting off/locking out service or having unused connections is insufficient to avoid regulation as a waterworks. The owner must demonstrate that the waterworks definition does not apply by:

- Physically removing and capping connections in excess of 14, and
- Certifying in writing that the population has permanently decreased below 25 persons. This certification can be a detailed census along with a written plan to hold the population below 25 persons.

ODW requires confirmation³ from the owner of physical removal or capped connections. This will usually require removing the service connection to below grade to prevent re-occupancy of the lot. Simply proving vacancy will not qualify for the change in status because it is too difficult to monitor occupancy. Staff will continue to regulate the waterworks until the revocation process is complete. See Appendix A, Example 4.

C. Unused Service Connections – System Inactivity

There are some systems, such as mobile home parks or small housing developments, which have 15 or more existing connections, but the used (or occupied) connections may fluctuate above and below 15. ODW and EPA consider such systems to be active and, therefore, subject to the *Regulations*, even during those times when the waterworks does not have at least 15 connections in use.

Simply having unused (un-occupied) service connections will not disqualify a system from the definition of a waterworks. To avoid regulation by ODW it must be determined that the system is “inactive”. Following EPA policy, ODW determines inactivity based on the number of service connections that remain unused for one year or more.

Waterworks which do not have at least 15 service connections in use, and do not serve at least 25 people (both conditions must hold true for a period of a year or more), should be inactivated (from SDWIS inventory) and are not required to monitor, report, or conduct routine surveillance until the system becomes active. A system that meets the definition after a period of inactivity, by bringing unused connections back into service or adding new connections must be reactivated.

D. Reduced Operation Periods

Some facilities with seasonal operations such as: schools, summer camps or migrant labor camps will not continuously meet the population criteria of the waterworks definition. Even during these time frames the waterworks remain active in SDWIS and subject to ODW’s authority. Monitoring is suspended for seasonal waterworks that have a defined annual operating period and winterize facilities (e.g. TNC campgrounds and

⁸ Confirmation can include but will not be limited to ODW staff present when the zones are segregated, signed statement from the owner, photographic evidence provided by the owner, etc.

resorts). Seasonal waterworks that provide water (e.g. schools w/ office staff) during the “off” season are to continue to monitor.

IV. PERMITTING POLICY FOR EXISTING WATERWORKS

This section applies to newly-discovered waterworks, reclassified waterworks, or waterworks with a change in ownership, capacity, or treatment. In accordance with §32.1-172 E. of the *Code*:

“Whenever application shall be made to the Commissioner for a permit he shall examine the application and as soon as practicable thereafter shall issue the permit if in his judgment the proposed waterworks will furnish pure water. If the proposed waterworks is not in compliance with all regulations of the Board but in the opinion of the Commissioner the public health will not be jeopardized, the Commissioner may issue a temporary permit for such a period of time and subject to such conditions as the Commissioner may deem appropriate for the owner to achieve compliance with such regulations.”

A. Permitting Actions

It is the policy of the ODW to issue permits in a timely fashion once all of the permit application requirements are satisfied. The following identifies the permitting options available to the ODW.

1. No permit is issued

ODW shall not issue permits until the applicant has met all the requirements of the permit process. See WM 784 for details. No Operation Permit shall be issued to a waterworks when an imminent danger to public health or welfare exists (for example, when water quality data showing levels of PMCL contaminants greater than the Unreasonable Risk to Health (URTH)⁹ values).

2. Temporary Permit is issued

A Temporary Permit may be allowed by *Va. Code §32.1-172E* if public health will not be jeopardized. A Temporary Operation Permit is an Operation Permit that specifies an expiration date and may contain conditions that the waterworks must address. The Temporary Permit option provides ODW with an additional tool to compel compliance, gather additional data, or set time limits for unresolved issues. Typically, a Temporary Permit will be issued as a result of unresolved issues, during a requested permit application, in the case of a newly found system, or following revocation of a previous permit due to new owner or enforcement action.

Temporary Operation Permits shall be issued when the waterworks is not demonstrating reliability, and additional time is necessary for:

- Complying with an administrative order,
- Complying with a requirement to conduct an engineering evaluation or study, or perform tests to determine yield or drawdown,

⁹ Unreasonable Risk To Health. An EPA term denoting contaminant levels that may be significantly above the PMCL.

- Complying with a requirement to install treatment or storage,
- Evaluating treatment for processes that do not fall under provisional Permits,
- Addressing deficiencies found during the sanitary survey,
- Developing a monitoring or performance history.

A Temporary Permit may also be issued under the following circumstances:

- A consecutive system has a purchase contract with a limited duration.
- A waterworks has been purchased and will be connected to another system by a specified date.

In general, a Temporary Permit will not be required for newly constructed waterworks except in the case where additional time is needed to complete a surface water influence determination.

3. Provisional Permit is issued

A Provisional Permit may be allowed by the *Regulations* §12 VAC 5-590-290 for water treatment methods, processes, or equipment which are not covered by the design criteria in Part III or Part IV of the *Regulations* and which in principle and/or application are new or non-conventional. A Provisional Permit allows additional time for testing and evaluation of the treatment method, process, or equipment to establish confidence the waterworks will operate as proposed without jeopardizing public health. Refer to §12 VAC 5-590-290 for requirements.

4. Standard Permit is issued

A Standard Operation Permit shall be issued when all of the following conditions have been met: The waterworks

- is deemed reliable (see section IV B for clarification),
- is designed and constructed in accordance with Part III and IV of the *Regulations* (or they are deemed eligible for “grandparenting” - see section IV C for requirements),
- has met all the requirements identified in WM 784.

B. Demonstration of Reliability

The determination of reliability must be made when ODW is undertaking permitting or enforcement actions and in response to problems, complaints, etc. The resulting permitting action and eligibility for grandparenting are dependant upon the outcome of the reliability determinations. Reliability may be a factor in determining enforcement actions which are not covered in this memo.

Reliability means the ability to provide water consistently adequate in quality and capacity. In accordance with 12 VAC 5-590-490 B; “*All waterworks shall provide adequate treatment and pure water*”. Additionally, waterworks must provide adequate capacity to meet maximum demands without creating health hazards.

1. Adequate Water Quality: Reliability relating to water quality is the ability to provide adequate treatment and pure water that consistently meets the requirements of Part II of the Regulations. Reliability related to water quality is to be addressed through the compliance and enforcement procedures but shall be considered when issuing a Temporary or Standard Permit or when no permit is to be issued.
2. Adequate Capacity: Waterworks shall be deemed reliable with regard to capacity unless there is evidence of water pressure problems, excessive leakage, or periodic water outages. Evidence that shows failure to maintain performance or failure to correct problems may consist of, but is not limited to VDH investigations, sanitary survey findings, or complaints.

The time frame for reliability determination shall normally be the past five years with more recent information given greater weight. If the owner has not resolved problems or has not resolved complaints by consumers the waterworks shall be deemed as not meeting reliability requirements.

C. Grandparented Waterworks

1. Policy Application

For egregious health related problems ODW is under no obligation to issue an Operation Permit, see Part IV A.1 of this memo.

Grandparenting status for permitting is only conferred upon existing waterworks with regard to Parts III (Design Manual) and IV (Noncommunity Exceptions) of the *Regulations*. There is no grandparenting with regard to Part II (Operational Regulations) or for newly constructed waterworks. A waterworks is eligible for grandparenting under a Standard Operation Permit only when they have demonstrated reliability related to capacity.

Waterworks with pre-existing structural or design conditions that do not meet Parts III or IV but show reliability regarding capacity are eligible for consideration. For those waterworks that qualify for grandparenting status, ODW policy is to permit the waterworks to the number of existing connections and existing conditions (usage as in number of restaurant seats) even if it exceeds the limiting values (i.e. capacity evaluation, reference WM 865) determined through engineering analysis based on Part III of the *Regulations*.

ODW's policy is to grant an exclusion from Part III of the *Regulations* (Manual of Practice for Waterworks Design) to newly-discovered waterworks *provided* that the system has a history of reliability as related to capacity and verified by ODW. This policy also applies to existing waterworks transferred to ODW's jurisdiction.

A Standard Operation Permit shall be issued to grandparented waterworks provided that they exhibit a history of reliability. A Temporary Operation Permit (see section IV A.2) shall be issued to grandparented waterworks where there is no history or an

unsatisfactory history of reliability. The Temporary Permit shall confer grandparented status for the duration of the permit.

2. Transfer of Ownership

The grandparented status of a waterworks with a Standard Operation Permit can be transferred to a new owner provided that the system:

- has historically met and continues to meet the reliability requirements ,
- maintains the number of connections and existing conditions of the previous permit.
- has completed the permit application requirements (see WM 784).

In this case, the new owner is issued a Standard Operation Permit. The Field Office staff shall meet with each new owner to discuss the *Regulations*, ownership requirements, and recommend waterworks improvements be made so the system will comply with Part III of the *Regulations*. The Owner shall be apprised in writing that grandparenting status may be terminated by expansion, modification, or failure to maintain reliability. It should be noted that there is no guarantee that the grandparented status will be granted to any new owners during future sales.

3. Loss of Grandparented Status

a. Failure to Achieve or Maintain Reliability:

If grandparented status is jeopardized due to a failure to meet the conditions of reliability as related to capacity the owner shall be notified of the deficiencies, issued an NOV (as appropriate), and provided adequate time to correct deficiencies. If the deficiencies are not resolved in the time provided the Standard Operation Permit shall be revoked or the Temporary Permit shall be allowed to expire.

Because the grandparented waterworks failed to demonstrate reliability, its grandparented status is lost and cannot be transferred to a new owner through a Standard Operation Permit. The new owner can be issued a Temporary Permit for the existing connections and conditions, allowing time for the new owner to comply with requirements or make necessary improvements. See example in Appendix B.

b. Expansions and/or New Construction to Meet Additional Demand

In accordance with 12 VAC 5-590-50 B.:

“Compliance with design criteria set forth in Part III and Part IV is necessary for waterworks modification and construction commenced after the effective date of these revised regulations [after September 1, 1974].”

Grandparented waterworks that wish to expand service (an increase in service population or number of connections) lose grandparented status. The waterworks must comply with Part III and IV of the *Regulations* for any of the new and existing connections. See Appendix C, Examples 1 & 2.

V. PERMIT REVOCATION POLICY

The Commissioner may revoke any waterworks Operation Permit whenever he determines that certain conditions have been met pursuant to 32.1-174 of the *Code* and 12 VAC 5-590-320 of the *Waterworks Regulations*. These include:

1. Change in ownership;
2. Failure to comply with the conditions of the permit;
3. The waterworks can no longer be depended upon to furnish pure water;
4. The capacity of the waterworks is inadequate for the purpose of furnishing pure water;
5. The waterworks have been abandoned and discontinued supplying pure water;
6. Failure to pay the waterworks operation fee;
7. Failure to abide by order issued by the Commissioner;
8. Violation of Title 32.1 or of Part II of the Regulations.

Additionally, permit revocation may be initiated by ODW or voluntarily by written request from the owner when the system no longer meets or has not yet met the definition of a waterworks. It is imperative that the owner provide adequate justification to show the system no longer qualifies as a waterworks. Once ODW determines that the justification is adequate, the Field Office may proceed with permit revocation. Until that time the system will continue to be regulated as a waterworks.

ODW shall request that the C and NTNC owners voluntarily notify all customers of the change in status and of any outstanding water quality issues (such as PMCL, SMCL, or monitoring violations). If the owner declines to notify the customers 60 days prior to revocation, ODW shall consult with the local health director regarding the need to notify customers directly.

VI. WATERWORKS REQUESTING EXEMPTIONS TO PERMITS

§12VAC 5-590-150 allows for the Commissioner to grant exemptions to PMCLs or treatment technique requirements due to compelling factors (which may include economic factors). ODW will evaluate requests for exemptions when received, and will make recommendations to the Commissioner about granting or denying such requests. Granting of an exemption will be a rare instance.

VII. WATERWORKS REQUESTING VARIANCES TO PERMITS

§12VAC 5-590-140 allows the Health Commissioner (or designee) to grant a variance to an operational regulation, treatment technique requirement, primary maximum contaminant level (PMCL) or secondary maximum contaminant level (SMCL) by following appropriate procedures set forth in the Regulations. It is ODW policy to consider granting variances for some operator requirements and metering of TNC waterworks using less than 10,000 gpd. No variances shall be issued for SMCLs. ODW will evaluate requests for variances when received, and will make recommendations to the Commissioner about granting or denying such requests. Granting of a variance for treatment techniques requirements or PMCLs will be a rare instance.

END OF MEMO

APPENDIX A

Operation Permit Examples

Example 1:

A developer has applied for a new Operation Permit. Six homes are occupied and 50 homes are proposed. Although the system does not yet meet the definition of a waterworks; it will be regulated as the owner intends to become a waterworks. If the number of connections or persons served does not meet the 15/25 criteria within 36 months the field office shall consider revoking the permit. See Section III A. 1.

Example 2:

A preschool is licensed for 15 “slots”. Fifteen children attend morning sessions and ten other children attend afternoon sessions, three days per week, September through May. Five staff members are present. On the surface this waterworks may appear to be an NTNC since it serves at least 25 of the same persons per day. However, 3 days per week for 38 weeks = 114 days which is less than 6 months and therefore it is to be regulated as a TNC.

Example 3:

A day care center is licensed for 40 “slots”. Actual attendance varies, but the sum of children and staff is frequently less than 25 persons. Unless the service population is consistently below 25 (and verified via records) or the facility operates less than 6 months out of the year this facility is to be regulated as an NTNC.

Example 4:

An existing mobile home park that is currently served by a facility that has nine service connections in use and contains an additional six unused service connections. The facility has requested to have its permit revoked to avoid regulation. Since ODW assumes occupancy of 3 persons per trailer the owner must provide evidence of the population being less than 25 and a plan to maintain the population below 25. If the owner provides evidence, has service lines removed to below grade, and the field office verifies this - the permit can be revoked.

Example 5:

The owner of a small convenience store with a permitted waterworks wants to switch to serving bottled water to its consumers to avoid ODW regulation. They have a bathroom (toilet, sink and utility shower) and a kitchen with a sink for their employees. There are no water fountains but their soda machine had a “water” button that dispensed tap water. The field office has verified they have permanently disconnected the tap water. Since the system no longer serves water to the public it is no longer considered a waterworks and the permit can be revoked.

APPENDIX B
Loss of Grandparented Status Example

Example:

A mobile home park permitted with 28 existing connections has several PMCL violations. It has one well with unknown yield capacity and storage that does not meet Part III of the *Regulations*. ODW is proceeding with enforcement for the PMCL violations. The system is sold to a new owner and the owner has requested an Operation Permit.

Corrective Action Steps The Field Office shall:

Step 1: Begin the process to revoke the permit issued to the previous owner. Make an evaluation of the performance of the system capacity by reviewing files, records of complaints, site visit to install pressure recorder, sanitary surveys, etc. If the waterworks has satisfactory performance relating to capacity ODW proceeds with Step 2. If it is determined that the waterworks is not reliable relating to capacity ODW proceeds with Steps 3, 4, and 5.

Step 2: Issue a Standard Operation Permit for 28 existing connections. The installation of treatment for the PMCL violations shall be addressed through enforcement. The waterworks retains its grandparented status. This means the new owner is not required to address the unknown yield or storage capacity conditions at this time.

Step 3: If ODW has evidence of inadequate capacity (e.g. low pressure via pressure recorder), the waterworks forfeits its grandparented status. The field office issues an NOV for low pressure and storage and proceed to enforcement to require improvements. This would be combined with the order for PMCL violations.

Step 4: Issue a Temporary Operation Permit for 28 existing connections. Prior to the expiration of the Temporary Permit the waterworks must address all deficiencies to comply with Part III of the *Regulations*. The evaluation for adequate treatment, storage/source capacity and installation of improvements should also be made conditions of the Temporary Permit.

Step 5: Upon expiration of the Temporary Permit, a Standard Operation Permit may be issued if improvements have been completed. If not, an NOV is issued for operating without a permit and ODW will proceed with enforcement actions as necessary.

Appendix C
Grandparented Status During Expansion

Example 1:

A grandparented community system with an Operation Permit for 48 existing connections wishes to add 3 more homes. It has one well of unknown capacity and inadequate storage based on Part III of the *Regulations*. Due to the expansion the waterworks will forfeit its grandparented status.

Example 2:

A grandparented mobile home park with 54 connections has been found to have exceeded its permitted capacity of 49 existing connections. This may be due to unauthorized connections or in response to hardship conditions (private wells have gone dry). It has one well and inadequate storage based on Part III of the *Regulations*.

Corrective Action Steps The Field Office shall:

Step 1: Issue an NOV. Make an evaluation of the performance of the system capacity by reviewing files, records of complaints, site visit to install pressure recorder, sanitary surveys, etc. If it is determined that the waterworks is reliable relating to capacity, ODW may proceed with Step 2 or 3. If it is determined that the waterworks is not reliable relating to capacity ODW should proceed with Step 4.

Step 2:

Comply with the existing permit/Grandparented status can be retained. Give the owner an opportunity to reduce connections by a specific deadline, to return to compliance and routine surveillance.

Or,

Step 3:

Proceed with Expansion/Grandparented status is forfeited due to expansion. Issue a Temporary Permit for 54 existing connections that provides a reasonable amount of time for improvements. Add a condition of the Temporary Permit that requires the acquisition of additional capacity (a second source and 200 GPD/ERC of storage for each connection per Part III of the *Regulations*). Proceed to the next step.

Step 4: Upon expiration of the Temporary Permit, a Standard Operation Permit may be issued if improvements have been completed. If not, an NOV is issued for operating without a permit and ODW will proceed with enforcement actions as necessary.

MEMORANDUM

SUBJECT: Definitions of Types of Public Water Systems and Populations Served by Those Systems

FROM: Connie Bosma, Chief (Signed by Ray Enyeart)
Drinking Water Branch

TO: Drinking Water/Groundwater Protection Branch Chiefs
Regions I-X

We have been asked several times recently to define what constitutes the "population served" of transient and nontransient noncommunity water systems (TNCWS & NTNCWS). In the process of drafting guidance on populations we realized that we needed to refer to other terms which also beg for clarification. We, therefore, believe this is a good opportunity to reiterate definitions related to the types of water systems, and in some cases, to define terms for the first time. We have also included a flow chart that may be helpful in deciding what type of system a water supply is. While we have attempted, through these definitions and flowchart, to be as specific as possible, we realize that this guidance is not, and probably could not be, a cookbook. We do believe, however, that the document offers sufficient definitions and explanations to allow for reasonable and consistent decisions on system categorization and population identification.

SYSTEM TYPE:

Probably the best place to begin is with the National Primary Drinking Water Regulation (NPDWR) definitions of the various types of water systems. Excerpts of those definitions follow. Emphasis has been added to highlight the pivotal criteria.

PWS *“has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily. at least 60 days out of the year.”*

CWS *“a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.”*

NCWS *“a public water system that is not a community water system.”*

NTNCWS *“a public water system that is not a community water system and regularly serves at least 25 of the same persons over 6 months per year.”*

TNCWS *Not defined in regulation. Implied to be any NCWS which is not a NTNCWS.*

The above definitions contain two terms which in turn require some explanation - "year-round residents" and "same persons." We would define these terms as follows:

Year-Round Resident (or Residential Consumer)

an individual whose primary residence is served by the water system. [The individual need not live at the residence for 365 days a year for it to be considered his/her year-round residence.]

Same Persons (i.e., Non-Residential but a Regular Consumer)

an individual who does not reside at a place served by the water system, but has a regular opportunity to consume water produced by the system. [Obvious examples are children at school and employees at their workplace.]

We provided guidance earlier (September 16,1987) on how much time a person had to have access to a water system to be considered a regular consumer. In summary, that guidance said:

Regular opportunity (or regular access)

four or more hours per day, for four or more days per week, for 26 or more weeks per year.

There is another term which should be defined because it is used frequently, even though it does not appear in the NPDWRs - "transient or transient consumer." We offer the following definition:

Transient Consumer

an individual who has the opportunity, to consume water from a water system, but who does not fit the definition of a residential or regular consumer. [Obvious examples are people stopping by at a highway rest stop, people vacationing for a few days or weeks at a hotel or resort, people having lunch or dinner at a restaurant, etc.]

SYSTEM POPULATION:

With the types of systems defined, we can define the populations served by each.

Population Served (for any type of system)

*The number of residential consumers **plus** the average of the number of regular consumers served, per day, during a month **plus** the average of the number of transient consumers served, per day, during a month.*

The averages of the regular and transient consumers may (and most likely will) change from month to month, and season to season. For the purposes of determining compliance with the State (or Federal) regulations, we propose that the State have the option to decide whether to keep the population served as a fixed number throughout the entire year, or to change it from season to season. If, however, the choice is to keep a fixed number (which is what we recommend), it should be the highest average daily population that would occur during the year. For purposes of reporting to the Federal Reporting Data System (FRDS), the population served [data element C117] could also change each quarter since States have the ability to change inventory information in FRDS on a quarterly basis. Again, we would prefer that the reported populations remain as stable as possible, and therefore suggest that the population reported to FRDS be the highest average daily population that would occur during the year.

Following are a few examples of determining the type of water system and its population:

- Example 1: A system, solely serving a small restaurant, has no residential consumers, 10 employees (regular consumers), and serves an average of 300 customers (transient consumers) per day, year round. The system is a transient noncommunity water system, serving a population of 310 (0 residents + 10 regular consumers + an average of 300 transients / day) .
- Example 2: A system, solely serving a campground/lake/swimming beach of a State park, serves 4 people in the park ranger's residence (residential consumers), 20 cabins (estimated by the State - 300 people), and averages another 250 visitors per day that swim at the lake's beach. During the fall and spring the 20 cabins are only partially occupied, and usually just on the weekends, the campground is closed but the lake is still open for boating. During the winter only the park ranger's residence is in operation. The system is a transient noncommunity water system since it does not have 25 or more residential consumers and it does not have 25 or more regular consumers for more than 6 months per year. The system has an average population of 604 (4 residents + 50 regular consumers + 300 transient consumers + 250 transient consumers) during the most populous month.
- Example 3: A system, solely serving a rural elementary school, serves the principal and 6 teachers and 85 students. The school is in operation for 9 months of the year. The system is a nontransient noncommunity water system because it serves 25 or more regular consumers for more than 6 months per year. The system has an average population of 92 (7 regular consumers + 85 regular consumers).
- Example 4: A system, serves a church, the minister's home, and 2 neighboring homes. There are 5 people that reside in the minister's home, and a total of 7 people that reside in the neighboring homes. The church operates a year-round preschool which has 2 teachers and 15 children. The system is a nontransient noncommunity water system because it serves a total of 12

residential consumers and 17 regular consumers, which are served for 6 or more months. An average of 100 parishioners attend church or Sunday school each Sunday. In addition, the church holds other functions such as choir practices, youth group meetings, and dinners. The daily average, over any given month, for the transient population is 25 people. The system has an average population of 54 (12 residents + 17 regular consumers + 25 transient consumers).

We request your review and comment on the above. Unless there are major disagreements with the proposal, we plan to issue the definitions as a Water Supply Guidance. If, however, there appear to be significant or sufficient objections to the proposal, we will re-group and re-propose a definition, or set up some type of forum to resolve the objections. Please call, or send, any comments to Ray Enyeart on 382-5551. I would appreciate your feedback by September 30. Thanks.

Attachment:

Flowchart for Determination of PWS, CWS, NTNCWS and TNCWS

