	OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE POLICY AND PROCEDURE	DEPARTMENT OF ENVIRONMENTAL QUALITY		
Original Effective Date: October 1, 1999 Revised Date: Reformatted Date: January 7, 2013	Subject: New Systems Capacity Assessment For Nontransient Noncommunity Public Water Systems Division/Office and Program Names: ODWMA-Public Water System Supervision Program <table border="1" data-bbox="506 394 1136 466"> <tr> <td data-bbox="506 394 906 466">Number: ODWMA-399-014</td> <td data-bbox="906 394 1136 466">Page: 1 of 7</td> </tr> </table>	Number: ODWMA-399-014	Page: 1 of 7	Category: <input type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Noninterpretive <input type="checkbox"/> External/Interpretive
Number: ODWMA-399-014	Page: 1 of 7			

A Department of Environmental Quality (DEQ) Policy and Procedure cannot establish regulatory requirements for parties outside of the DEQ. This document provides direction to DEQ staff regarding the implementation of rules and laws administered by the DEQ. It is merely explanatory; does not affect the rights of, or procedures and practices available to, the public; and does not have the force and effect of law.

INTRODUCTION, PURPOSE, OR ISSUE:

As a result of the 1996 amendments to the federal Safe Drinking Water Act, the state of Michigan must implement a capacity development program or risk the United States Environmental Protection Agency withholding 20 percent of the Drinking Water Revolving Loan Fund capitalization grant. One of the elements of this program is to ensure that all new community public water systems commencing operation after October 1, 1999, demonstrate technical, financial, and managerial capacity with respect to each national primary drinking water regulation.

The References section of this policy lists rules, policies, and documents that establish minimum requirements, describe acceptable practices, and/or provide guidance that may be used to develop and assemble the information necessary for the Office of Drinking Water and Municipal Assistance (ODWMA), or its agent, to perform a capacity assessment at a community or nontransient noncommunity public water system.

The applicant seeking a construction permit for a proposed community or nontransient noncommunity public water system is responsible to compile the information necessary for the ODWMA, or its agent, to conduct the capacity assessment.

This policy replaces policy DWRP-03-014, New Systems Capacity Assessment for Nontransient Noncommunity Public Water Systems, dated October 1, 1999.

AUTHORITY:

1. Capacity Development Program

Authority for Michigan's capacity development program originates in the Michigan Safe Drinking Water Act, 1976 PA 399, as amended (Act 399), MCL 325.1001 *et seq.* and administrative rules, R 325.10101 *et seq.*

2. Capacity Assessments

MCL 325.1003b allows the DEQ to conduct capacity assessments. New system capacity assessments are covered in MCL 325.1004(2), which:

- a. Directs the DEQ to evaluate the adequacy of the proposed water supply.

OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE
POLICY AND PROCEDURE

Number: ODWMA-399-014

Subject: New Systems Capacity Assessment For Nontransient
Noncommunity Public Water Systems

Page 2 of 7

- b. Directs the DEQ to conduct a capacity assessment and determine if the system has technical, financial, and managerial capacity to meet all requirements under Act 399.
- c. Allows the DEQ to return plans and specifications to the applicant if inadequate.
- d. Allows the DEQ to reject plans and specifications if the waterworks system will not satisfactorily provide for the protection of public health.
- e. Allows the DEQ to deny a permit for construction if the capacity assessment shows that the proposed system does not have adequate technical, financial, or managerial capacity to meet the requirements under Act 399.

3. Criteria for Capacity Assessments

MCL 325.1008 directs the DEQ to consider a water supply's unique characteristics when specifying design and operation standards and establishing criteria for capacity assessments.

4. Order The Water Supply To Make Changes

MCL 325.1015 directs the DEQ to inspect a water supply and determine its adequacy to protect the public health. If not adequate, the DEQ may order alterations in the waterworks system or its method of operation.

STAKEHOLDER INVOLVEMENT:

Prior to the drafting this policy in 1999, meetings were held with internal and external stakeholders to determine how to implement the capacity development program including how to ensure new systems had technical, managerial, and financial capacity to meet the requirements of Act 399 and protect the public health.

DEFINITIONS:

"Capacity assessment" – an evaluation of the technical, financial, and managerial capability of a community supply or nontransient noncommunity water supply to comply and maintain compliance with all requirements of Act 399 and the rules promulgated under Act 399. See MCL 325.1002 Definitions.

"Capacity plan" – information necessary for the DEQ or its agent to conduct the Capacity Assessment.

"Plans and specifications" – drawings, data and a true description or representation of an entire waterworks system or parts of the system as it exists or is to be constructed, and a statement on how a waterworks system is to be operated. See MCL 325.1002 Definitions.

OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE
POLICY AND PROCEDURE

Number: ODWMA-399-014

Subject: New Systems Capacity Assessment For Nontransient
Noncommunity Public Water Systems

Page 3 of 7

POLICY:

1. For Technical Capacity

The assessment of technical capacity will be performed throughout the permit process. It begins with a review and approval of the information submitted with the Permit Application and observed during the well site inspection, resulting in the issuance of the Construction Permit. The assessment of technical capacity concludes with the inspection of facilities and information provided prior to Final Approval.

2. For Financial Capacity

The assessment of financial capacity will be based on a review of the financial details of the proposed water system, hereafter referred to as a Financial Plan. The financial plan will only cover the operation and maintenance of the water system, not the entire business. An approved financial plan is required for Final Approval.

Details of the water system Financial Plan may include:

An analysis comparing the development of the proposed, new public water supply to connecting to a community public water supply if a community public water supply is reasonably available.

An identification of resources to address water system costs, including:

- i. Operator certification and training;
- ii. Operational and maintenance costs for the water system that may include:
 1. Utilities;
 2. Chemicals;
 3. System maintenance; and
 4. Monitoring and laboratory costs.
- iii. Administrative costs that may include:
 1. Emergency repairs or contingency plan funds;
 2. Permit fees for water system construction; and
 3. Annual water supply fees.

A statement from the water system owner on the financial capacity of the proposed water system to meet the requirements of Act 399.

3. For Managerial Capacity

The assessment of managerial capacity will be based upon a review of the managerial details of the proposed water system, hereinafter referred to as the Managerial Plan. This plan will only cover the management of the water system, not the entire business. The Managerial Plan must be approved prior to Final Approval.

Details of the water system Managerial Plan may include:

- Designation of a properly certified operator for the facility, as required by the Michigan Safe Drinking Water Act;
- Acknowledging the need for on-going training to keep operators current and allow them to maintain the required certification;
- A contingency plan to address the appropriate response to a temporary loss of water service, including:

**OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE
POLICY AND PROCEDURE**

Number: ODWMA-399-014

Subject: New Systems Capacity Assessment For Nontransient
Noncommunity Public Water Systems

Page 4 of 7

- i. Closure;
- ii. Obtaining an alternate source of water;
- iii. Public notification procedures;
- iv. An inventory of contractors and suppliers;
- v. A method for notifying the local health department;
- vi. Emergency repair procedures; and
- vii. Cross connection control as covered during the inspection prior to Final Approval.

PROCEDURES:

WHO	DOES WHAT
Applicant	<p>Permit Application and Capacity Development Plan Owners, or agents acting on their behalf, submit a capacity plan and an application with required documentation for review and approval. At a minimum, the following information must be submitted with the permit application:</p> <ul style="list-style-type: none"> • Name, address, and telephone number of owner(s); • Facility name, address, and telephone number; • Facility type and/or number of service connections; • Ownership: Public or Private; • Population to be served and months of operation; • Contractor name, address, and telephone number; • Calculated or estimated system capacity (gallons per minute); and • Site plan with proposed well location(s) showing isolation from buildings, property boundaries, potential sources of contamination, etc.
ODWMA District Staff or its agent	<p>Well Site Inspection Conducts an on-site inspection of the proposed well site for determining its acceptability.</p>
ODWMA District Staff or its agent	<p>Issuance of Construction Permit Reviews the application, rejects the application, or approves and issues the Construction Permit.</p>

OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE
POLICY AND PROCEDURE

Number: ODWMA-399-014

Subject: New Systems Capacity Assessment For Nontransient
Noncommunity Public Water Systems

Page 5 of 7

WHO	DOES WHAT
ODWMA District Staff or its agent	<p>Final Approval</p> <p>Based on a satisfactory inspection of the completed construction, notifies the owner that the system is approved to supply water to the public. The inspection, at a minimum, includes the following:</p> <ul style="list-style-type: none"> • A site inspection of the newly constructed well and distribution system including cross connection inspection; • Receipt of an acceptable well record from the contractor; • Receipt of analyses indicating compliance with applicable drinking water standards; and • Approval of managerial and financial plans.

REFERENCES:

1. Rules

Rules promulgated under Act 399 address technical and managerial capacity criteria. Specifically, the following Parts of the rules cover items in a capacity assessment.

- a. Part 7 – *Surveillance, Inspection, and Monitoring* establishes monitoring requirements for public water supplies and outlines the oversight responsibilities of the DEQ.
- b. Part 8 – *Groundwater Sources* establishes the procedure for approval of proposed wells, including the requirement for a hydrogeological study. This part also identifies well construction requirements and the necessary well appurtenances for all community water supplies (CWSs).
- c. Part 9 – *Surface Water Sources* establishes requirements for the development of a surface water source, including evaluation criteria and intake design.
- d. Part 10 – *Treatment Systems and Pumping Stations* establishes the treatment requirements for systems relying upon a surface water or groundwater under the direct influence. It also describes some of the design requirements for pumping stations.
- e. Part 11 – *Distribution Systems and Storage Tanks* establishes requirements for design and installation of water mains and storage tanks.
- f. Part 12 – *Reliability* describes the requirements for maintaining the reliability of public water supplies to assure a continuous supply. Included in this section is the requirement to identify existing and projected system needs on a 5- and 20-year basis, and to propose a method of complying with system capacity requirements. This section also establishes the minimum number of wells, the requirement for standby power, and the procedure for responding to an interruption in service.
- g. Part 13 – *Construction Plans and Specifications and Permits* prescribes requirements of CWSs regarding the submission of plans and specifications or other pertinent information for the construction of a waterworks system. It includes the requirement for

OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE
POLICY AND PROCEDURE

Number: ODWMA-399-014

Subject: New Systems Capacity Assessment For Nontransient
Noncommunity Public Water Systems

Page 6 of 7

an Engineering report, basis of design, and a cover letter explaining the plans and specifications.

- h. Part 14 – *Cross Connections* requires a Community Water System to develop a cross connection control program.
- i. Part 16 – *General Plans* identifies the items required in a general plan or map of the water system.
- j. Part 17 – *Ownership of Public Water Supplies* identifies the requirements for private ownership of a public water supply to be approved, including the need for a local governmental resolution, a stipulation to conditions, and an escrow fund.
- k. Part 19 – *Examination and Certification of Operators* identifies the certification requirements for operators in charge of water treatment and distribution systems. It includes continuing education requirements to maintain the certification.
- l. Part 23 – *Emergency Response Plans* requires the preparation of a plan for emergency response and requires notification of the DEQ when an emergency affecting the public health is discovered.

2. Guidance Information

Refer to these documents when conducting capacity assessments:

- a. *Recommended Standards For Water Works*, prepared by the Great Lakes-Upper Mississippi River Board Of State Sanitary Engineers, may be purchased from the Health Education Services, P.O. Box 7126, Albany, New York 12224, telephone 518-439-7286, or on the Internet at <http://www.hes.org/>.
- b. *Suggested Practices For Waterworks Design, Construction, And Operation For Type I Public Water Supplies*, prepared by the DEQ and available on the Internet at <http://www.michigan.gov/deqwater>, click on Drinking Water, Community Water Supply.

3. Policies

Refer to applicable policies when conducting capacity assessments. Policies include, but are not limited to:

- a. Permit requirements for water main construction
- b. Aquifer test requirements for public water supply wells
- c. Requirements for use of high-density polyethylene water main
- d. Grouting of community water supply wells
- e. Lead and Copper Implementation
- f. Design and operational requirements for arsenic removal treatment systems for compliance with the arsenic maximum contaminant level
- g. Classification of public water supplies

OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE
POLICY AND PROCEDURE

Number: ODWMA-399-014

Subject: New Systems Capacity Assessment For Nontransient
Noncommunity Public Water Systems

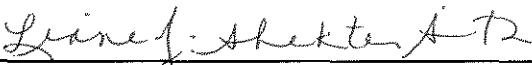
Page 7 of 7

4. Other Documents

Forms, templates, explanations of requirements, and other guideline documents are available to distribute to applicants and water supplies to help them comply with Act 399. These include but are not limited to:

- a. Monitoring guides and monitoring schedules
- b. Sample site plans
- c. Emergency response plans
- d. Explanation of annual fees
- e. Non-municipal source water protection guide

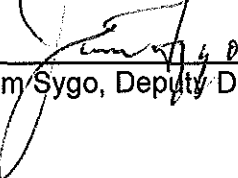
OFFICE CHIEF APPROVAL:



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12-28-2012
Date

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1/7/2013
Date