

Michael Hill Health Agency Director

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### Technical, Managerial, and Financial (TMF) Capacity Report Guidance

All new public water systems, systems changing ownership, or water systems operating without a permit seeking water supply permits are required to demonstrate to Environmental Health Services that they possess adequate Technical, Managerial, and Financial (TMF) capability to assure the delivery of pure, wholesome, and potable drinking water.

The following is the TMF Capacity Report Criteria for new public water systems, change of ownership, and existing or "found" public water systems operating without a permit.

- For new public water systems: The <u>MANDATORY</u> elements are required at the time the permit application is submitted. The <u>NECESSARY</u> elements will be required within a specified time frame determined by Environmental Health Services.
- For public water systems operating without a permit: <u>ALL ELEMENTS</u> are required at the time the permit application is submitted.
- For a change of ownership: ALL ELEMENTS are required at the time of submittal. Consult with EHS to determine which elements currently on file for the water system will require updating.

#### **TECHNICAL CAPACITY**

- System Technical Description (mandatory) Provide a map showing the location of the system's existing service area, each water source, treatment facility, pumping plant, storage tank, and pressure zone in the system, as well as all distribution system piping and a narrative description of the following system components:
  - a. Sources of supply
  - b. *Pumping stations:* Provide make, model, and size (in horsepower) of all pumps, including boosters. If the pump is submersible, also provide the depth at which it is set.
  - c. Reservoirs and storage tanks: Provide actual storage capacity, tank material, and an as-built drawing that indicates location of vent, overflow pipe, inlet, outlet, electrical instruments, sample taps, valves, emergency drain, level indicator mechanism (float), and any additional features, such as circulating pumps or treatment.

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- d. *Treatment:* Provide specification sheets for all treatment, including manufacturer make and model, system parameters, sizing information, a schematic of the flow of water through the entire system, required pressure, daily flow capacity, specifications on treatment additives, brine discharge configuration, maintenance and operation plan including responsible staff.
- e. *Distribution system:* Provide a brief description and affix plans. Include pipe material(s), size of pipe, location of flow meters and service connections, pressure zones, hydrants, sample taps, valves, and backflow devices. Indicate relationship to fire suppression storage and lines.
- 2. **System Technical Evaluation (mandatory)** A technical evaluation of the system facilities with respect to its capacity to reliably meet current and proposed drinking water standards. The evaluation must:
  - a. Assess all treatment facilities for compliance with applicable regulations, e.g. the Surface Water Treatment regulations (CCR, Title 22, Chapter 17). This assessment must address all regulatory requirements that apply, as well as the treatment facility's ability to reliably produce water that meets the appropriate water quality standards. The capacity of each unit process at a treatment plant must be assessed to determine the limiting flow through the treatment plant.
  - Assess the source, storage, and distribution system's design capacity and operational ability to provide water to maintain the pressure specified in CCR, Title 22, Section 64566, throughout the distribution system under daily demands. This assessment should be based on historical system water production (or demand) and must include fire flow if the system is used for fire protection.
  - c. Show that the water system has the ability to accurately and continuously measure the quantity of water produced from each water source, with the exception of emergency or standby sources, in order to determine total production.
  - d. *For initial domestic public water supply permit applications:* Describe the design basis of all water system facilities.

### 3. Source Capacity Assessment and Evaluation (mandatory)

a. An analysis of the capacity of the water source(s) to meet system demand that includes the following information:

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- i. Estimates of amount of water needed to serve the annual and maximum day demand.
- ii. Safe maximum source capacity for system: Please provide recent constant rate pump test (within the last 5 years) for each well. For pump test requirements regarding duration and monitoring intervals for drawdown and recovery, please refer to *California Waterworks Standards, Article 2 Permit Requirements, Section 64554 New and Existing Source Capacity.* Methodology must be approved by EHS prior to conducting pump test.
- b. For proposed sources, provide a characterization of the water quality, including a comparison with established or proposed drinking water standards.
- 4. **Consolidation Feasibility (mandatory)** An assessment to identify all existing public water systems located in the immediate proximity of the existing or proposed water system. The assessment must determine the feasibility of incorporating into an existing water system or being owned, operated, or managed by another agency.
- 5. **Operations Plans (necessary)** A system Operations Plan that addresses how the system will be operated to comply with drinking water requirements and the California Waterworks Standards. Water system managers should develop the plan with operating personnel and establish procedures to review the plan annually with operators. This plan must not be more than five years old and, at a minimum, must address all the applicable items given below and must assign each task to a designated staff role, such as Operator, Administrator, or Contracted Treatment Vendor (specify company name):
  - a. Daily operational practices,
  - b. Emergency operational practices,
  - c. Flushing dead-end mains,
  - d. Storage tank inspection and cleaning,
  - e. Main repair and replacement,
  - f. Consumer complaint response procedures,
  - g. Maintenance and testing of backflow prevention devices,

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- h. Inspecting and exercising water main valves,
- i. Maintenance of master flow meters,
- j. Responsibilities of operating personnel,
- k. Operation of all production, transmission, and distribution facilities,
- I. Record keeping,
- m. Maintenance plan for all facilities
- n. Inspection and maintenance of all treatment units

<u>For systems utilizing a surface water source:</u> The water system must have an EHS approved Surface Water Treatment Rule Operations Plan and an Operations Plan for any other treatment provided (including chlorination). The plan should address treatment unit operational procedures, process monitoring, response to violations, and reporting and procedures to review and update all Operations Plans every five years.

6. **Certified/Qualified Operators (necessary)** – For existing or proposed water treatment plants, provide the name and grade of certification of each operator that will be operating the system. Where treatment is not provided, provide the name and qualifications of each person that will be operating the system. If the operator(s) have not been hired, submit a plan and schedule for hiring one and provide a description of relevant training and experience that persons responsible for the operation of the water system have received. At a minimum, all systems require a licensed Distribution 1 (D1) operator.

#### **MANAGERIAL CAPACITY**

1. **Ownership (mandatory)** – Description of the type of system ownership (e.g. sole proprietorship, partnership, corporation, mutual, governmental agency) along with the name(s), address(es), and phone number(s) of the owner(s). If the water system is under temporary ownership (e.g. a developer), the eventual ownership and timing for the change in ownership must be described. If land or major facilities that are essential to the reliable operation of the water system are not legally owned by the water system, the terms of the agreement for the long-term use of the land or facilities must be described. Examples of the type of agreements that must be described include easements for facilities on land not owned by the water system and agreements for the use of or leases for treatment facilities. The owner of the water system must list all

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public water systems that are currently or have previously been owned by the applicant (solely or in partnerships, as corporations, etc.) Applicants must also list any water system that they previously operated or are currently operating under contract for another owner or entity. In the case of a sole proprietor, a plan must be submitted that details how the system will continue to be operated in the event the owner becomes incapable of carrying out this responsibility. Disclosure of any encumbrances, trust indentures, bankruptcies, decrees, legal orders or proceedings or other items that may affect or limit the owner's control of the water system. If the water system does not own the land, they must provide evidence that they are entitled to full control over all aspects of the water system, including wells, tanks, and distribution lines. The tenant lease agreement must state that the tenant is the responsible party for all aspects of the water system and a copy of the agreement must be submitted with the application.

- 2. **Water Rights (mandatory)** Information that describes the legal basis and authority for diversion or extraction of water. If groundwater is being pumped from a groundwater basin that has not been adjudicated, a statement to that effect is sufficient documentation to satisfy this requirement. If the source water is subject to permit requirements under the State Water Resources Control Board (SWRCB), a copy of the water rights permit must be included. Approval for extraction of water from an adjudicated groundwater basin must be demonstrated by confirming documents from the basin watermaster.
- Emergency/Disaster Response Plans (necessary) The water system must submit an Emergency/Disaster Response Plan. Response procedures must be clearly outlined. The plan must:
  - a. Address all disasters/emergencies that are likely to occur in the water system's service area. As a minimum, all water systems must address earthquake and major fire emergencies. Other potential emergencies that may occur in a water system's service area include wildfire, flooding, water outages, power outages, and water contamination;
  - b. Designate responsible personnel and provide a clear chain of command and identify responsibilities;
  - c. Include procedures for ceasing operation until the water system is restored;

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- d. Include emergency procedures to quickly assess damage to water system facilities, provide logistics for emergency repairs, monitor progress of repairs and restoration, communicate with health officials and water users, and document damage and repairs;
- e. Describe the steps that will be taken to resume normal operations and to prepare and submit reports to appropriate agencies.

#### **FINANCIAL CAPACITY**

**1. Budget Projection (mandatory)** – A detailed projection of anticipated revenues and expenditures for at least a five-year period must be submitted. If there is no revenue generated from the operation of the water system, only expense data must be supplied.