



Thomas C. Jorling
Commissioner

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M E M O R A N D U M

TO: Regional Water Engineers, Bureau Directors, Section Chiefs

SUBJECT: Division of Water Technical Operations Guidance Series
(1.5.4)
Guidelines for Staffing Wastewater Treatment Plants
(Originator: Andrew Weist)

- I. **Purpose:** To provide guidelines to DEC regional office staff to determine if a wastewater treatment plant is being adequately staffed to insure proper operation and maintenance of the facility.
- II. **Discussion:** Operator Certification Regulations (Section 650.2) require that a wastewater treatment plant treating domestic or domestic/industrial wastes "be under the responsible supervision of an appropriately approved operator at all times". The regulations say nothing, however, about how many hours a day the plant should be manned, or what additional staff should be employed at the plant. This area has been pretty much left to the discretion of the facility owner. As a result, some plants, particularly the smaller ones, are not adequately staffed. Because there is such wide variation in the size, layout and type of equipment at a treatment plant, it is impossible to set forth specific detailed guidelines as to staff size or hours of coverage. Regional staff experience, knowledge of the local situation and understanding of the process requirements must be used to make a judgement on staffing in any particular situation.

The purpose of this TOGS is to provide some criteria by which regional staff can assess the adequacy of staffing at a particular plant.

III. Guidance: To assure proper operation, a plant should be visited every day. Furthermore, enough time should be spent at the plant each day to:

- a.) inspect all units and equipment for proper operation.
- b.) perform necessary maintenance/cleaning.
- c.) collect samples/run tests/record data.
- d.) make process adjustments.

The size of the plant, treatment process, types of equipment and permit requirements will determine how much time is required to accomplish the above.

The following reference material (which should be available in the region) may be of help in assessing staffing needs:

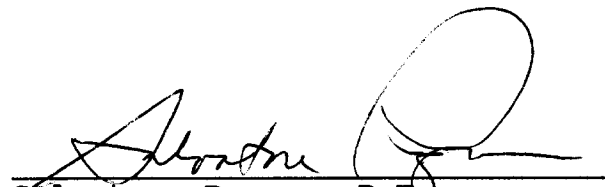
1. Considerations for preparation of O&M manuals; EPA - 430/9-74-021.
A chart on page 86 gives suggested staffing for a range of plant sizes.
2. Estimating staffing for municipal wastewater treatment facilities; EPA, 1973.
Appendix D - hours of operation required for various processes.
3. Improving POTW performance using the composite correction approach; EPA - 625/6-84-018.
Appendix A - Guidelines for Interpreting Performance Limiting Factors Items A-2-a.
4. Handbook - Retrofitting POTW's; EPA -625/6-89/020. Revised version of Ref. #3. Same Appendix.)
5. Management of Small to Medium-sized Municipal Wastewater Treatment Plants; EPA-430/9/79-013.
Chapter 7 discusses staffing.
6. MOP II - Operation of wastewater treatment plants - WPCF. Table 1-1 shows staffing for various sized plants.
7. DEC Policy and Procedures Manual Section 9200, Specifically: 9216.13(1); 9216.14; 9216.15, 9216.16,
8. NYCRR, Part 650, specifically: Sections 650.1(a), (b); 650.2(a).
9. Plant O&M Manual.
For any specific plant, the O&M manual should have a section on recommended staffing for that plant. This will provide a starting point for assessing the adequacy of the present staff.

Special Situations:

1. **Temporary Coverage:** Provisions must be made for coverage during temporary absences of the operator (vacations, illness, etc.). If there is a certified assistant operator, this will satisfy the regulations. If there is not a certified assistant operator at the plant, then arrangements should be made for coverage by a certified operator from a neighboring facility or a contract operator.
2. **Operator Leaves, Retires:** The facility owner must take immediate steps to replace the operator or arrange for coverage by an appropriately certified operator until a replacement can be hired. Use of an assistant operator (one grade lower than the operator) does not satisfy the requirements of Part 650.
3. **Contract Operations:** Part 650.2(a) still applies. The contractor's employee who is routinely assigned to the plant, should be certified in the appropriate grade. Staffing by an assistant operator (one grade lower) would be acceptable provided the "operator" visits the plant on a regular, frequent basis and spends enough time at the plant to ensure proper operation.

SPDES

Upon request by the RWE, the Bureau of Wastewater Facilities Design (BWFD) will include a compliance requirement in a facility's SPDES permit that they submit a staffing plan for the Region's review. The RWE should supply documentation to BWFD supporting the need for the permit modification. A sample schedule of compliance for a staffing plan is attached.



Salvatore Pagano, P.E.
Director
Division of Water

cc: Dr. Banks
Mr. Campbell
Mr. Bruening
Regional Engineers for Environmental Quality

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule.

| Action Code | Outfall Number(s) | Compliance Action | Due Date |
|-------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| | 001 | <p>The permittee shall submit a staffing plan for the _____ wastewater treatment facility to the NYSDEC Region _____ Water Engineer for approval within 90 days of the effective date of this permit. If disapproved, the permittee shall submit a revised plan to the satisfaction of the Region _____ Water Engineer within 30 days of receipt of written notice and of providing reasons for disapproval. Once approved the staffing plan shall be deemed a condition of this permit and any failure to substantially comply with such plan shall be a violation of this permit.</p> | EDP + 90 days |

b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice under terms of the General Conditions (Part II), Section 5. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
3. A description or any factors which tend to explain or mitigate the non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

c) The permittee shall submit copies of any document required by the above schedule of compliance to NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS, unless otherwise specified in this permit or in writing by the Department.