

REQUEST TO CONSTRUCT, MODIFY A GAS CHLORINATION SYSTEM

Description: Prior to the construction of new or modification of an existing gas chlorination system, approval must be secured from the Westchester County Department of Health.

Applicable Codes: Part 5, Subpart 5-1 Section 5-1.22 of the New York State Sanitary Code and Chapter 873, Article VII, Section 873.707.1 of the Laws of Westchester County.

Fees: Chapter 873, Article XXI of the Laws of Westchester County.

Submittal: The submittal shall be forwarded to the Westchester County Department of Health, 145 Huguenot Street, 7th Floor, New Rochelle, NY 10801, Attention: Program Administrator. When requesting Approval of Plans for a project pursuant to the above provisions, the following list serves as minimum filing requirements:

- (1) One (1) original form DOH-348 with all items completed. This form must be dated and bear the original signature of the applicant.
- (2) One (1) original Engineer's Report bearing the original signature and seal of a Professional Engineer licensed and registered in the State of New York. The Engineer's Report must provide a narrative of the scope, details and specifications of the project.
- (3) A minimum of three (3) sets of construction plans (one (1) set of plans will be retained by the Department) that are prepared by a Professional Engineer licensed and registered in the State of New York. These plans must bear the professional's original signature and seal, be prepared pursuant to Title VIII Article 145, Section 7209 of the New York State Education Law and signed by the Municipal Engineer when applicable.
 - (A) Engineer's Report Content
 - I. Minimum requirements to be included in the report:
 1. Provide a narrative as to the scope of the project.
 2. Describe chlorinator as to make, type, capacity, and quantity of gas chlorine to be stored on site.
 3. Indicate the quantity of water to be treated denoting clearly the minimum and maximum capacity of the system and calculating the contact time to the first customer.
 4. Denote the proposed rotometer the minimum and maximum capacity in mg/l of such.

5. Provide applicable calculation to support; cylinder replacement time, chlorine contact time for both minimum and maximum supply demand.
6. Provide the make and type of the auto analyzer which shall automatically adjust the rate of disinfection and the make and model and specifications of the leak detection system.
7. Provide calculations to demonstrate that ventilation is adequate and that no short circuit is apparent in the room.
8. Support selection of flow measuring device and that design will provide enough storage for thirty (30) days.
9. Support selection of heater that indoor room temperature will be maintained @ 70° F with an ambient temperature of 0° F.
10. Support selection of stand-by power-generator to insure such will provide adequate power during an emergency or support that emergency power is not warranted.
11. For a one ton chlorine cylinder installation, a chlorine leak repair kit must be provided.

(B) Plan Contents

I. Minimum requirements to be included in the plans:

1. Location Map
2. Site Plan of the project denoting all applicable appurtenances including profile views.
3. Provide specifications of the piping network, pipe diameter material of construction and class of pipe.
4. Provide location of chlorinator room, storage area, and ventilation system.
5. Illustrate the location of the gas cylinders, the rotometer point of application of disinfection and any other chemical additives.
6. Provide and locate sampling taps for raw and treated water insuring such are representative of the actual water conditions.
7. Show location of auto-analyzers insuring such are continuously monitoring and adjusting the rate of disinfection and alarm system for the leak detection.
8. Clearly illustrate the following:
 - a. Separate room for tank storage
 - b. Location of the observation window.
 - c. All doors must open outward and be equipped with a panic bar.
 - d. That in use and stored cylinders are chained and all cylinders are clearly marked as to full or empty.
 - e. Self-contained breathing apparatus, ammonia
 - f. That all piping for gas chlorination is contained in the separate room.
 - g. Located scales and provide assurance that accuracy of such is to the nearest 0.5 lbs.

9. Ventilation System:

- a. Fan and light switches must be located outside of the gas chlorination room.
- b. That the exhaust from the room must be located near the floor and the intake to the room must be located near the ceiling to avoid short circuiting.
- c. That the exhaust discharge is located approximately two (2) feet above the ground level in the direction of the down wind side of the building.
- d. Locate the intake and discharge of the exhaust system to prevent air flow short circuiting.
- e. Locate flow metering device and automatic on-off deactivator instrumentation for no flow condition.
- f. Provide location of heating equipment and light location.
- g. Provide standby power or justification why such is not required.
- h. Provide dual chlorinators with automatic switchover.

ISSUANCE OF COMPLETED WORKS APPROVAL FOR A GAS CHLORINATION SYSTEM

Description: Prior to the activation of new or modified gas chlorination system, approval must be secured from the Westchester County Department of Health.

Applicable Codes: Part 5, Subpart 5-1 Section 5-1.22 of the New York State Sanitary Code and Chapter 873, Article VII, Section 873.707.5 of the Laws of Westchester County.

Fees: Chapter 873, Article XXI of the Laws of Westchester County.

Submittal: The submittal shall be forwarded to the Westchester County Department of Health, 145 Huguenot Street, 7th Floor, New Rochelle, NY 10801, Attention: Project Reviewer. When requesting Approval of Completed Works pursuant to the above provisions, the following list serves as minimum filing requirements:

- (1) A minimum of two (2) sets of “As-Built” plans, (one (1) set being retained by the Department) bearing the original signature and seal of the construction supervising Professional Engineer licensed and registered in the State of New York. This plan must reflect any changes from the original approved plan by “Bubbling” these changes. Note: All deviation from the original plan approval must have received approval from this Department.
- (2) That the construction supervising Professional Engineer licensed and registered in the State of New York provides a Certification Letter bearing the professional’s original seal and signature which will be forwarded with the “As-Built” plans. This letter shall provide a statement that the undersigned has supervised or witnessed the construction, and that there are no construction changes from the original Departmental approval. In the event that construction changes do exist and have received prior Departmental approval, this letter must reflect such changes.