# VILLAGE OF LOWVILLE

## SPECIFICATIONS

## FOR

## CHLORINE FOR DISINFECTION OF DRINKING WATER

**INTENT:** It is the intent of the Village of Lowville, New York, and therefore these specifications, to solicit bids for the supply of chlorine to the Village to be used in the disinfection of the Village's drinking water in the treatment process at the Village's Harold F. Woolschlager Water Filtration Plant.

**AWARD OF CONTRACT:** The contract for the purchase of materials and/or equipment specified herein will be awarded by the Village of Lowville to the lowest responsible, qualified bidder who is finally selected by the Village of Lowville. In cases where two or more responsible bidders shall submit identical bids, the Village of Lowville may award the contract to either such bidder. The Village of Lowville reserves the right to make such investigations as it deems necessary to determine the ability of the bidder to supply the materials and/or equipment, and the bidder shall furnish to the Village such information and date for this purpose as may be requested, including, but not limited to, the name and address of the manufacturer of the materials and/or equipment quoted on. The Village also reserves the right to reject any bid if the evidence submitted by the bidder or the investigation of such bidder fails to satisfy the Village that such bidder is properly qualified to carry out the obligations of the bid or to complete deliveries contemplated therein. The Village, in order to be assured of the responsibility of any bidder, reserves the right to review the premises of the bidder and to consider the service capabilities of the bidder. The Village further reserves the right to weigh its prior usage experience, if any, in the matters of efficiency and economy in the supply and delivery of all materials and/or equipment for which bids are received. No bid for materials and/or equipment may be accepted from or contract awarded to any supplier who is in arrears in taxes or upon debt or contract to or with the Village of Lowville, or who has defaulted as surety or otherwise upon a contract or obligations to the Village, or who may be otherwise disqualified under any act of the legislature not inconsistent with the Charter of Code.

**RIGHT TO REJECT:** The Village of Lowville reserves the right to reject any bid which does not fully comply with the specifications set forth herein, and further reserves the right to reject any and all bids at any time before the contract is awarded. The Village Superintendent of Public Works will be the sole judge as to whether any bid complies fully with the said specifications. Any such decisions by the Superintendent shall be final and conclusive.

**ESCALATOR PROVISIONS:** The price bid by the bidder shall be the prices to be paid for all material and equipment, including deliver of such, to be furnished under this contract for the entire contract period. No increases in the prices will be allowed under any circumstances during the contract period and any bid to which escalator clauses are added or appended by the bidder will be rejected as being informal. No fuel or delivery surcharge of any kind will be acceptable under any circumstances.

**OUT OF STATE CORPORATIONS:** A certificate of authority to do business in the State of New York under Section 1312 of the Business Corporations Law of the State of New York must be submitted by all out-of-state corporations with their bid.

**PAYMENT:** Payment shall be made for each delivery in faithful performance of the contract and after submittal by the bidder of an invoice for each delivery to the Village of Lowville and the proper auditing of said invoice by the Village of Lowville. Invoices shall contain the individual serial numbers of the cylinders being delivered, as well as the serial numbers of the cylinders being picked up for return.

## INSTRUCTIONS TO BIDDERS

1) Sealed bids will be received by the Village of Lowville, Lowville, New York, in accordance with the published invitation for bids. The sealed bids, subject to the conditions contained herein, will then be publicly opened and read aloud. Bidding sheets are to be returned attached to the specifications, and all bids must be on the form(s) furnished.

2) Delivery of all orders shall be made within three (3) working days from receipt of verbal order by phone from Village personnel. Supplier must notify the Village by phone of the delivery date and time as soon as it is arranged after receiving an order from the Village. All deliveries shall be made to the Village's Harold F. Woolschlager Water Filtration Plant, located approximately ten (10) miles east of the Village of Lowville on Lewis County Route 26. The supplier shall provide the phone number to be used for ordering chlorine in the space provided on the bid form(s). In addition, the supplier of chlorine shall supply a 24-hour emergency number at which trained personnel of the supplier can be contacted in the event of leaks or other emergencies involving the chlorine and/or equipment supplied under this contract, in the space provided on the bid form(s).

3) Any material and/or equipment delivered by the supplier which is not in accordance with the Specifications or is otherwise unsatisfactory, in the opinion of the Superintendent, shall be replaced with satisfactory material and/or equipment.

4) An estimated quantity of 10 cylinders per month will be used by the Village throughout the duration of the contract period. **This is an estimated quantity only-the actual quantity may vary.** The Village shall not be held liable for the purchase of any guaranteed minimum amount during the contract period.

## SPECIFICATIONS

**STANDARD USED:** All chlorine and related equipment supplied under this contract shall meet the requirements of the latest edition of AWWA Standard B301-Standard for Liquid Chlorine, in its entirety.

**AFFIDAVIT OF COMPLIANCE:** The supplier shall furnish, attached to the bid form(s), a "blanket" affidavit of compliance stating that the liquid chlorine to be furnished under this contract, at the time of container loading, complies with all applicable requirements of AWWA Standard B301.

**CONTAINERS:** Chlorine shall be supplied in industry standard 150-lb (68-kg) cylinders. Cylinders shall comply in every respect with the current Hazardous Materials Regulations of the US Department of Transportation (DOT) (49 CFR 100-177 [Chapter 1, Subchapter C] for shipment of chlorine.

*Inspection: All containers shall be carefully inspected, reconditioned, cleaned, maintained, and loaded by the supplier in strict accordance with the latest editions of Chlorine Institute Pamphlet 17 and Compressed Gas Association Pamphlet C6, including proper holding of filled containers to check for leaks before filling. Any containers that show evidence of leakage, damage, or corrosion shall be rejected. Chlorine cylinder valves,

valve threads, and valve packings shall be in good mechanical order and shall operate normally with a wrench that is not longer than 8 in. (0.2 m). If the condition of the container and valves does not conform to any recommended practice in the above pamphlets in all applicable respects, the supplier will be notified and shall immediately take whatever action is necessary to correct any non-compliance(s). Routine inspection and cleaning of the interiors of chlorine cylinders shall be performed by the supplier because of the potential buildup of contaminants when chlorine is removed as a gas.

*Marking: Each container shall be marked to clearly indicate the contents and shall bear the current proper precautionary information required by DOT, USEPA, and other regulatory agencies concerned with the hazardous nature of chlorine. Each cylinder shall be individually serial numbered.

*Packaging Precautions: Suppliers receiving liquid chlorine from a manufacturer shall exercise great care in packaging operations so that there is no addition of moisture or other contaminants that would increase the formation of ferric chloride, or the introduction of any other deleterious material that could clog valves, evaporators, or chlorinators.

*Filling Density: shall not exceed 125 percent. The filling density is defined as the percent ratio of the weight of chlorine in the container to the weight of water that the container will hold at 60 F (15.6 C).

*Washers: Washers supplied with the cylinders for connection to chlorination equipment shall be made of lead, with a standard set of new washers provided with each cylinder. If lead washers are not routinely provided with each cylinder by the contracted supplier, the supplier shall purchase an individual quantity of the lead washers, minimum 200, at no additional cost to the Village, and supply the washers to the Village upon the first delivery of chlorine. The supplier shall also provide the name, address, and phone number of the vendor from which the supply of lead washers was purchased, if requested by the Village.

**CHEMICAL REQUIREMENTS:** The chlorine supplied under this contract shall be a minimum 99.5 percent pure by volume as determined by analyzing the chlorine by ASTM E412 or by gas chromatographic method.

**IMPURITIES:** The liquid chlorine supplied under this contract shall contain no soluble mineral or organic substances in quantities capable of producing deleterious or injurious effects on the health of persons consuming water that has been properly treated with the liquid chlorine, including, but not limited to, meeting the following requirements:

*Moisture: The liquid chlorine supplied shall be dry chlorine. Moisture shall not exceed 150 ppm (0.015 percent), by weight.

*Heavy Metals: The sum of all heavy metals shall not exceed 30 ppm (0.003 percent) expressed as lead.

- Lead shall not exceed 10 ppm (0.001 percent) reported as lead.
- Mercury shall not exceed 1 ppm (0.0001 percent) reported as mercury.
- Arsenic shall not exceed 3 ppm (0.0003 percent) reported as metallic arsenic.

*Nonvolatile residue: The total residue shall not exceed (1) 50 ppm (0.005 percent), by weight, in liquid chlorine as loaded by the manufacturer in tank cars and chlorine tank trucks, or (2) 150 ppm (0.015 percent), by weight, in liquid chlorine as packaged in cylinders.

*Carbon tetrachloride: Carbon tetrachloride shall not exceed 100 ppm (0.010 percent). Testing for carbon tetrachloride is not required unless a carbon tetrachloride tail gas scrubbing system is used in the chlorine production unit or if it is used as a diluent for nitrogen trichloride.

*Trihalomethanes: Trihalomethanes shall not exceed 300 ppm (0.030 percent).

**REJECTION OF MATERIALS AND/OR EQUIPMENT:** If the material and/or equipment supplied under this contract does not meet the chemical, physical, or safety requirements of AWWA Standard B301, USDOT, USEPA, or as specified herein, the supplier shall be notified immediately after recognition of any noncompliance(s), but in any case, within thirty (30) days of receipt of shipment. In this event, supplier shall remove the unsuitable material and/or equipment from the premises of the Village of Lowville at the latter's request and replace it with a like amount of satisfactory material and/or equipment; with any price adjustments to be mutually agreed upon between the Village of Lowville and the supplier.