

VILLAGE OF NORTHBROOK**STANDARD OPERATING PROCEDURES**TITLE: Lead Water Service Line Replacement Page 1 of 2

Number: 81-023 00 Effective Date: January 15, 1996

Dept.: Public Works Distribution: Groups 1, 2, 3, 4, 5, 6

APPROVAL

Department Head

Village Manager

INDEX: **SOP**
LEAD WATER SERVICE LINE REPLACEMENT

BACKGROUND: This SOP contains provisions formerly set forth in Administrative Order #1 (August 1990). A related SOP, Lead Service Line Replacement - Remodeling (#81-015) was promulgated on February 17, 1995.

The United States Environmental Protection Agency (USEPA) has established a statistical "yardstick" for lead concentrations in drinking water which involves a concept the USEPA defines as "action level". The current action level for lead is 15 micrograms per liter ($\mu\text{g/l}$). If more than 10% of a community's required samples exceed the new action level, it is required to implement certain corrosion control measures. In the event such efforts are not effective in reducing lead levels during subsequent testing rounds, additional work may be required, including replacement of approximately 7% of lead service lines annually. It is estimated there are approximately 1,600 lead lines in the Village.

Studies have shown that there is a potential for lead contamination to originate within a consumer's own service line and interior plumbing. Lead enters drinking water primarily as a result of the gradual corrosion, or wearing away of materials containing lead in the service line and household plumbing. These materials include lead pipes, copper pipes containing lead-based solder and faucet fixtures containing lead. Northbrook has required copper service lines for more than forty (40) years and the practice of using lead-based solder in plumbing was banned in 1986. As a matter of public policy, Northbrook has been replacing all lead service lines encountered during water main replacement projects for the past 8-10 years. Further, the Village is currently treating its water with polyphosphate, as approved by the IEPA with the intent of reducing the potential for lead corrosion in the future.

POLICY: It is the policy of the Village to foster the replacement of lead service lines to the extent that public and customer fiscal concerns will reasonably allow.

PURPOSE: A. To mandate replacement of lead lines whenever a structure served by such a line is scheduled for demolition.

B. To provide a cost sharing mechanism for customers with lead service lines which can be demonstrated to cause an exceedance of lead levels within that customer's system.

PROCEDURE: A. Demolition

Whenever an application is made for a permit for demolition of a structure, it shall be a primary condition of the permit that if the existing water service is lead, the line shall be replaced with a line constructed of materials approved by current Village standards. Language to this effect shall be clearly stated on the permit application form and the permit.

B. Owner Request

The Village shall, upon receipt of written request from the property owner, participate in the cost of replacement of a lead service line. This is contingent upon samples taken from the customer's plumbing system (in accordance with current IEPA guidelines) indicating that the line is contributing to lead levels in the customer's plumbing system in excess of 15 µg/l. Such cost sharing shall be limited to the pro-rata portion of the work within public right-of-way. The property owner shall pay all pro-rata costs for that portion of the work on private property. Reimbursement will be calculated as a percentage of the lump sum bid, based on the actual footage as measured in place. In no case will the Village pay for any in-house work beyond the water meter.

It shall be incumbent upon the property owner to furnish a minimum of three (3) written competitive quotations for such work, from licensed plumbers who are bonded in the Village. The work must be performed in accordance with all applicable Village and State codes. Bids shall include all work required for complete replacement of the line, including full restoration of lawns, sidewalks, curb and pavement, as applicable.

The Public Works Water Distribution Supervisor or Utilities Superintendent will review all bids and may, if they believe the bids to be unresponsive, solicit bids from other qualified contractors. The Village may also elect to pay the property owner or the contractor. Such payments will be made only after completion and approval of the job by the appropriate Village Departments. Subject to Departmental review, the low qualified or most responsible bid will be accepted and an "authorization to proceed" order will be issued.

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