

## ILZNO PROJECT SUMMARY

Issue Date:  
August 1967

PROJECT NO. LN-138    TITLE Study of Lead Release from P.V.C. Piping

PREVIOUS IDENTIFICATION ULC-12 Lead Stabilized P.V.C. Pipe

CONTRACTOR not selected

CURRENT CONTRACT none

CUMULATIVE EXPENSES (to July 31, 1967) none

1968 PROPOSED OR CONTRACT PRICE \$10,000

### 1968 AUTHORIZATION

|                                         |                 |
|-----------------------------------------|-----------------|
| 1967 & Prior Authorizations Uncommitted | \$10,000        |
| 1968 Proposed Authorization             | 10,000          |
| Undesignated Research Authorization     | none            |
| 1968 Proposed or Contract Price         | <u>\$10,000</u> |

MARKET APPLICATIONS Transport of potable water through rigid P.V.C. piping. Other uses of P.V.C. rigid sheets and piping where there is a hesitancy on the part of manufacturers at the present time to use lead stabilizers due to unknown toxicity fears.

OBJECTIVE To obtain lead release data from simulated service use of rigid P.V.C. piping for potable water systems.

### RESEARCH REVIEW

1. Current Status There is no proposal on this statement as yet.
2. Projected Research Obtain lead release data as outlined above.
3. Reports Issued
  - a. Progress Reports - not applicable
  - b. Proposal - not applicable
  - c. Work Statement - attached

### DEVELOPMENT REVIEW

1. Pilot Production - not applicable
2. Consumer Evaluation - not applicable
3. Licensing Activities - not applicable
4. Patents - not applicable
5. Publications
  - a. ILZNO - none
  - b. Development associations - none

### ECONOMIC INcentIVE

1. Market Goals - To obtain an entry into the market.
2. Applications and Market Volume - This has been an expanding market throughout the entire world outside the U.S. and we wish to get into it.
3. Rise of Market Defending - Not available.
4. Competitive Threat - Copper, galvanized and all other forms of piping.

LA-135

WORK STATEMENT

August 1967

Study of Lead Release from P.V.C. PipingI. Introduction

We are resubmitting this Work Statement which was first submitted during the 1964 budget meetings and approved in the amount of \$16,500. The project was set aside by your staff at that time due to our inability to make the necessary arrangements with the contractor, National Sanitation Foundation Testing Laboratory, Inc., arrangements that would have given us their approval to market pipe containing lead stabilizers for potable water use. Recently there have been several developments which lead us to believe that we have a chance to obtain an approval and to be able to market rigid P.V.C. pipe containing lead in the U.S. and South America.

The first development came from an official of the Pan American Health Organization, Dr. Spangler, who was most enthusiastic about the need in South America for P.V.C. pipe, and is of the opinion that only P.V.C. pipe stabilized with lead will meet the cost and effectiveness requirements. Spangler has promised us his complete cooperation in getting approvals.

The second development was a contact with the B. F. Goodrich Company in Cleveland, one of the largest manufacturers of this pipe in the world, who are most interested in using lead as a stabilizer because it is "the best, the cheapest, and the most easily used in the manufacturing process." The Goodrich people also pointed out that they are quite concerned about the toxicity of their presently used stabilizers, which are organo-tin compounds.

Accordingly we are presently gathering information about the next steps to take to obtain approvals from the necessary health agencies. In any event, we will need a screening test program to check out various formulations for possible release of lead during service use. This is the purpose of our present proposal, to obtain a nominal sum of money and interest a university laboratory in making the tests for us.

II. Scope

The purpose of this proposed program is to obtain lead release data from standard formulations of rigid P.V.C. piping and to use this data to obtain approval from health agencies having jurisdiction. Based on experiences in other countries, pipe properly formulated will meet all requirements for potable water service.

ECONOMIC INCENTIVE

The use of rigid P.V.C. pipe is expanding at a rapid rate throughout the world. In Europe it is estimated that 75% of such piping is manufactured using lead compounds as stabilizers. We have no estimate of the potential market for the U.S. because up until now it has been denied us. However, it is your staff's opinion that the potential market in South America with the Pan American Health Organization actively promoting the product will provide sufficient economic incentive to do this work.