

No gravity sewer pipe material lasts longer than VCP. Experienced sewer professionals know the service life of any system is only as good as its maintenance.

Proper sewer cleaning is vital to reducing costly Sanitary Sewer Overflows (SSOs), and extending the usable life of a sewer system.

Four Keys to Effective Sewer Cleaning:

Select Cleaning Tools Appropriate for Various Pipe Materials (Page 10)

Technological advances in sewer tools have increased the ability of sewer professionals to clean VCP more efficiently. Many tools in today's marketplace are damaging to other pipe materials.

Why a Centralizer Matters (Page 14)

A centralizer is operationally safer, it saves water, protects the tool, and increases cleaning efficiency by nearly 75%.

Consistent and Effective SOPs Reduce SSOs (Page 19)

Utilization of an SOP also ensures consistency in cleaning which is particularly important when managing crew schedules and frequency of cleaning for each pipeline.

Proactive Maintenance vs. the Cost of Repairs (Page 33)

A proactive sewer maintenance program is a proven cost saving venture when compared to a reactive maintenance program. Proactive programs reduce emergency construction costs as well as reducing SSOs and governmental liabilities.

VITRIFIED CLAY PIPE OPERATIONS & MAINTENANCE HANDBOOK

Maintenance & operations professionals across the country have come to appreciate the range of cleaning methods and tool options provided by the Vitrified Clay Pipe (VCP) in their systems.

- VCP allows for greater hydro-jet pressures and flow rates than flexible thermoplastic, fiberglass and CIPP materials.
- VCP allows for cleaning with a wider array of tools, nozzles and equipment which may damage other pipe materials.
- Mechanical cleaning methods are allowable and appropriate in VCP lines. Mechanical cleaning methods will damage flexible thermoplastic, fiberglass and CIPP materials.
- As a ceramic, even at 100-years old, there is no need to adjust pressures or cleaning methods for VCP due to age.

Operations & maintenance practices encountered throughout the country are many and varied. Those described here are considered sound, although it is recognized that there may be other equally satisfactory methods. Technical data presented are considered reliable, but no guarantee is made or liability assumed.

The information provided in this handbook is not intended to replace the judgment of an experienced maintenance professional. It is intended primarily as a beginning set of considerations for maintenance and design professionals as they consider the long-term implications of material selection in regard to the maintenance of sanitary sewer lines.

Additional information on the design and installation of clay pipelines can be found in NCPI's *Vitrified Clay Pipe Engineering Manual*.



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