



Cities Strong Supporters Of NASSCO's PACP

by Jeff Griffin ■ Senior Editor

NASSCO's Pipeline Assessment and Certification Program (PACP) is quietly but significantly changing the way sanitary sewer systems in North America are inspected and how inspection information is utilized to plan needed repairs, maintenance and rehabilitation.

Introduced in 2002 with the goal of standardizing pipeline inspection and evaluation procedures, growing numbers of cities and sewer districts are adopting PACP standards and training personnel to implement the program.

"The growth of the PACP has exceeded every forecast we have made for it and shows no sign of slowing," says Irv Gemora, executive director of NASSCO, the national organization representing sewer service companies that coordinated the development of PACP.

"Well over 200 sewer system owners – including some very large metro areas and sewer districts – require the use of PACP certified operators using PACP certified software to perform CCTV (closed-circuit television) operations in their system's areas," Gemora continues. "We have trained about 4,000 people to date and continue to train at a rate of 1,000 to 1,100 per year throughout the U.S. and now Canada."

PACP standardizes the ways sewer pipes are inspected and evaluated, trains and certifies the personnel who inspect and maintain records of sewer pipelines, and provides the means for compiling a comprehensive data base to help effectively plan and prioritize renovation of wastewater collection systems.

Criteria for conducting CCTV inspections is a key element in PACP which is the first program ever to provide common standards for inspection, coding, evaluating and exchanging information about the condition of pipelines in the U.S. wastewater systems.

Standardization using PACP permits integration of television data from multiple sources and reduces the number of subjective descriptions of pipeline conditions to improve productivity of inspection and assessment operations. With standardization comes consistency among agencies and CCTV contractors.

Software improvements add new dimensions to the program.

"Recent revisions to the PACP software enhance the ability of the cities to customize the data input to a degree so they can maximize the value of the CCTV reports," Gemora says. "The latest software revision also accommodates metric data entries.

This was done in response to requests from our friends in Canada."

Quick success

In a relatively short period of time, PACP has developed a highly-successful track record.

Dick Eubank, Baltimore County superintendent, pipeline maintenance division, says the county has been using PACP for about three and one half years.

"It works very well," says Eubank. "PACP helps us define deficiencies and determine what needs to be addressed first. Standardizing the ways pipelines are inspected helps our evaluation process and is especially important for our rehabilitation programs."

Eubank says the county PACP training has been completed by about 25 employees in his division.

Seattle Public Utilities (SPU) personnel review CCTV tapes using PACP coding to determine the structural condition and maintenance assessment for SPU's underground drainage and wastewater assets, says Jeff Williams, of Seattle Public Utilities Systems management branch.

Williams says the condition assessments serve two purposes:

- QA/QC (quality assurance and quality control) of the CCTV inspection process performed by the department of water works (DWW) operations staff, such as proper camera setup, accurate condition assessment of the asset, appropriate level of documentation provided; and

- Write-up of Maximo (Seattle Public Works work management system) work orders to provide appropriate maintenance intervals and maintenance tasks to address service defects, or written Maximo work orders to address rehabilitation action required to correct structural defects observed in the asset.

"We review CCTV recordings of new DWW underground assets to determine if the asset meets city standards and contract requirements, and is acceptable to place into active service," Williams explains. "Any defects or non-standard items are documented and forwarded to the SPU project manager for corrective action. We also review CCTV recordings of existing DWW underground assets as requested by SPU planning or design staff to provide a condition assessment of the asset in support of proposed future construction, wastewater system improvement, or impacts from other nearby construction, or change or use."

Williams says SPU is in the process of converting to digitized data through its contract with Cues Granite XP to perform condition assessment of the DWW underground assets to reduce data entry time and data entry errors.

NASSCO is a not for profit trade association established in 1976 by a small group of sewer service contractors. Today it is comprised of several hundred member organizations including representatives of cities, consulting engineering firms, contractors, and manufacturers and suppliers providing many industry technologies. ■

NASSCO Launches Manhole Assessment, Certification Program

Building on the success of PACP, NASSCO has developed MACP – the Manhole Assessment and Certification Program for grading and evaluating defects in manhole structures.

"MACP uses the established defect coding system found in the Pipeline Assessment and Certification Program (PACP) to the extent possible," says Irv Gemora, executive director of NASSCO, the national not-for-profit organization representing sewer service organizations that coordinates both PACP and MACP. "We also have tried to incorporate as much of the ASCE manhole standards as possible while maintaining the form and style of the PACP. Recognizing that manholes are much more complex structures than pipe has made the task somewhat more difficult. However, we believe the results will be very helpful to those who need to have a reliable and consistent manhole evaluation system."

A MACP training and certification program is being developed and because MACP is so heavily based on PACP, it is required that one be PACP certified before becoming MACP certified. Gemora says NASSCO will make free on-line MACP certification training available to the 4,000 industry specialists already certified for PACP and will absorb the costs of reprinting the PACP manual to include MACP. A one-day MACP certification training course will also be offered at the Underground Construction Technology Conference on Feb. 1, 2007, in Houston.

"These are good examples of NASSCO's commitment to investing in our industry," says Gemora.