CMOM IN WISCONSIN
4. MAINTENANCE ACTIVITIES

By Jack Saltes, Wastewater Operations Engineer
Department of Natural Resources

Maintenance Activities is the fourth of the eight elements of a Capacity, Management, Operation & Maintenance (CMOM) Program.

Collection system O&M is the essential element of a CMOM program. Just like your car, a collection system will eventually fail to perform without regular maintenance. Like a well-built four-legged stool, a comprehensive collection system O&M program includes the (1) mainline, (2) manholes, (3) lift stations AND (4) private laterals.

What O&M activities should be done? Studies have shown that optimizing collection system performance depends on specific maintenance tasks and frequencies. You should summarize and review your maintenance activities each year.

As asked for in the Compliance Maintenance Annual Report (CMAR): “what sewer system operation and maintenance (O&M) activities do you do?” Check those maintenance tasks you have done in the last twelve months (calendar year):
Cleaning (what % of system?)
Root Removal (what % of system?)
Flow Monitoring (what % of system?)
Sewer Line Televising (what % of system?)
Manhole Inspections (what % of system?)
Manhole Rehabilitation (what % of manholes were rehabilitated?)
Mainline Rehabilitation (what % of system?)
Private Sewer Inspections (what % of system?)
Private Sewer I/I Removal (what % of system?)
Lift Station O&M (how many lift stations was there major maintenance or repairs or upgrading done for the year?)

Since every collection system is unique, work to find out which maintenance activities and frequencies will give you the best value for the O&M dollar spent. A successful O&M program optimizes the performance of the collection system and over time reduces the frequency of (or eliminates) overflows, basement back-ups, complaints, sewer pipe failures, lift station failures and peak flows.

Trend graphs associated with these performance indicators can be viewed by clicking the graph buttons in your eCMAR and with a good CMOM Program, the graphs should show a downward trend over time. If the trend is increasing, this should raise questions as to why the increasing trend is occurring and perhaps refocus your maintenance activities or point to the need for rehabilitation work. View your trend graphs every year to assess your sewer system performance. In the example below, basement backups are being reduced as a
result of focused O&M efforts in areas where basement backups were problematic.

CMOM Program and collection system O&M references can be found on the last page of the Wisconsin CMOM Booklet:
http://www.dnr.state.wi.us/org/water/wm/ww/cmar/CMOM.htm