

CHARACTERIZING FOG SOURCES

It is important for each agency to fully understand the sources of their FOG problems prior to developing a control program. The agency must determine the location of collection system “hot spots” (areas within the collection system that require frequent maintenance), how these hot spots are related to FOG discharges, and where the FOG originates. Since FOG blockages are a “middle-of-the-pipe” problem, it is necessary to evaluate ongoing collection system maintenance, as well as all potential sources of blockages, to provide a complete and accurate picture of what is contributing to SSOs. This information allows an agency to determine where its resources should be focused to effectively control FOG discharges and reduce overflows and operational problems in a cost-effective manner.

Historical records of collection system maintenance activities should be reviewed to ascertain any useful information on the causes of SSOs and locations of any FOG-related hotspots.

A system for reviewing these records is outlined below:

- Identify any particular problem sites within the collection system based on SSOs, extent of cleaning frequency, odor reports, and any other type of citizen complaints.
- Review collection system operator’s notes, especially on the type of materials being removed during cleaning. (If this type of information is not being recorded, institute a standardized policy for data collection based on the following two action items.)
- Introduce standardized forms (cleaning and repair) for recording specific information during maintenance work.
- Distribute log books to keep with the maintenance/inspection vehicles for recording information during drive-by inspections.
- Compile the information and categorize the hot spots by the cause of the operational problems (e.g., roots, FOG, structural issues).
- Produce collection system maps that show the spatial relationships between the hot spots and particular areas of the municipality (e.g., high density or single-family residential areas, business districts, and restaurant districts). Many agencies use Geographic Information Systems (GIS) for mapping and data management that can be frequently updated and contain land use information.
- Rate the severity of each hotspot on the map and use this information to determine correlations between upstream use and FOG-related hotspots.
- Characterize the sources of FOG at each FOG-related hotspot. Depending on the source of the FOG, program resources should be allocated accordingly. For example, if FOG is accumulating downstream of a residential area, resources should be directed towards public education. However, if FOG problems are occurring downstream of restaurants and business districts, program resources should be allocated towards educating FSEs.