Disposable/Flushable Products Work Plan

Statement of Problem Issue:

Many public wastewater agencies throughout the State of California are experiencing significant maintenance problems associated with the accumulation of non-dispersible paper and tissue products that are disposed of by product consumers who routinely flush them down the household toilet.

These types of paper products are generally produced using a woven process and do not disperse when wet as toilet paper does. Consequently they tend to string together forming large balls of material that become lodged in the impellors of wastewater pumps and other process equipment. For many agencies (particularly small to mid-size) it has become a daily maintenance problem that requires significant manpower dedicated solely to the de-ragging of pumping equipment, bar screens and sewer cleanouts.

In gravity sewer collection systems these paper products often become hung up on roots within the sewer pipe or manhole causing undesirable sewer overflows. These sewer overflows needlessly consume agency resources and can result in a significant fine being levied against the agency by the regional water board.

Background and Description of Probable Cause:

Due mainly to convenience and advertisers claims of "flushable" that are boldly displayed on the product packaging, the consumer feels confident in flushing a widerange of products down the toilet.

While there is currently no uniform plumbing code or regulation that prohibits the type of materials that can be flushed down one's toilet, the size of the object generally provides the only limitation to its disposal option.

With the advent of low-flow toilets, the flushing power of most toilets have been greatly reduced. This in itself has led to an increase in private sewer lateral obstructions. In most cases when the plumber clears the obstruction from the sewer lateral, the debris is pushed farther down the line until it reaches the public sewer main. At this point the offending debris becomes the sewer agency's problem to deal with.

Manufacturer's processes for production of these types of products differ widely. Truly flushable products, such as toilet paper, are manufactured in a manner that the paper material breaks down when wet causing them to be classified as dispersible products.

Investigation and Documentation of Problem Source:

The first step in identifying the types of products causing the problem will be to inventory store shelves and the internet for those products that are labeled or advertised as being "flushable". The products will be studied to determine their physical characteristics and origin of manufacture.

The next step will be to attempt to investigate the type of manufacturing process associated with each product type. This may require obtaining information directly from the product manufacturer or by independent testing. Once this is completed, a spread sheet listing all of the products, the manufacturers' names, all distributor information and flushability status will be compiled.

In order to document the extent of the problem, a survey questionnaire will be developed and sent to public sewer agencies throughout California requesting documentation of maintenance problems associated with non-dispersible paper products that have been disposed of in the sewer system. Documentation may include, pictures, reports, maintenance logs, etc.,. Additionally, it will be requested that agencies provide any cost information that they may have associated with addressing the ragging problem.

Recommended Action:

Once product identification and documentation is complete, the following possible actions will be considered to mitigate the problem:

- Letters to the manufacturers explaining the problem and requesting changes in manufacturing and /or labeling.
- Development of a public outreach program for educating the public about the problem.
- Preparation of articles or white papers for publishing.
- Dialogue with legislators leading to possible legislation for setting standards.
- Local agencies may adopt restrictions or amend ordinances regarding sale of these items in their areas.

Implementation Schedule

Depending on the level of staffing available for this project, it is proposed that the investigation and documentation could be achieved in a period of six months time. Final action items could realistically take much longer.

Staffing options include:

- SCAP staff
- Consultants
- Agency volunteers

Funding Opportunities

Possible sources of funding may include:

- Federal/State grants.
- National research institutes.
- Wastewater organizations.
- Wastewater agencies.
- Product manufactures/associations.