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Key Points to Recognize About Sweeping Streets and NPDES Regulations

Here are the main points to consider when trying to assess how sweeping should fit into an overall NPDES pollution reduction plan.

- **Answer the question "Why are we sweeping?"** Is it just for cosmetic/aesthetic reasons, or are there water quality aspects to consider? If the answer includes water quality, then collaborate with your stormwater people to examine your current program. As you redefine your budget allocations, you'll also want to put a larger value on the small-micron pickup effectiveness of the sweeper you choose. In addition, evaluate both the sweeping frequency and the conditions under which sweepers will be used.
- **If your target is water quality goals, forget about sweeping areas without curb-and-gutter.** If a street does not have a curb, there will be no appreciable accumulation of debris.
- **Review sweeping studies available, most of which are available at www.WorldSweeper.com.** Use the information, especially results from geographical areas similar to the one you're in, to make future sweeper purchase decisions that maximize the potential for solving both water and air pollution problems in your particular area.
- **Probably the single biggest factor driving street sweeping effectiveness is removal of vehicles on sweeping days.** This is vitally important: a single car represents three spaces that can't be swept, since the sweeper operator must swing out around a car and then can't get back to the curbline until well past each parked vehicle. Develop and print brochures on the topic, and find innovative ways to distribute the information. For example, send the information out in city billing envelopes, put them onto your Web site as .pdf files, and provide them to environmental groups for distribution.

Many cities are now using the Internet creatively in this regard. Consider developing an e-mail signup Web site location that automatically reminds citizens to move their cars prior to sweeping days. Once in place, fines from vehicle citations will create an income stream that may even pay for a major portion of the sweeping program.

- **Consider contracting out sweeping services, which can often provide significant cost and service advantages.** In England, statutes require that cities bid in-house sweeping against contractors every few years. This tends to keep municipal operations more efficient. Some larger U.K. municipalities even bid on providing sweeping to smaller cities nearby.



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- **Another way to potentially save money when using a contractor:** Issue computerized fuel cards for the municipal contract. When the city pays the tab for fuel, fuel excise taxes are refundable.
- **Remove disposal costs from your sweeping bids.** Because future cost increases in this area are an unknown, experienced sweeping contractors typically realize they must overbid to account for unforeseen tipping fee increases that may not ever occur. Plus, when the contractor pays for disposal, there is actually a disincentive to doing a great job; the more material that is removed from the roadway, the less money the contractor makes.
- **Work creatively with sweeping contractors in other ways than hiring them to sweep.** These may include sweeper repair and assistance with sweeping frequency and sweeper selection.
- **Establishing a debris-screening and/or composting program can save over 50% on disposal costs.** If one of your local sweeping contractors operates a debris-screening program, the company may have enough capacity to add city debris to its existing operation. system also documents exactly when sweeping occurred at any particular location.
- **Citizens need to be educated about the latest in industry findings.** Educate your sweeping managers, as well as rank-and-file sweeper operators, about why a different sweeping frequency, type of sweeper, or switching to air-based technology now makes more sense. Doing so can even have positive implications for how well any new sweepers will be operated and maintained.
- **Reduce overall sweeping costs by specifying one of the variety of high-dumping sweepers that are now available.** These are designed to dump into dump trucks or roll-off containers, instead of using the sweeper for transport to a disposal facility. This keeps the relatively more expensive sweeper on the job, as well as keeps small-micron material from escaping due to double handling.
- **In order to make your sweeping program more efficient, upgrade part of your road system, especially in runoff non-attainment areas.** Steep curb cuts and potholes degrade performance of all types of sweepers, but more so regenerative air and, to some extent, vacuum sweepers.

Entities with EPA Phase I and Phase II permits now need to prove they are achieving BMP results. Before you spend significant dollars on retro-fitting and other relatively expensive infrastructure-based projects, learn how sweeping your streets with today's new technology is able to address runoff pollution on the order of 100 to 1,000% more cost-effectively.

For more information on any aspect of the power sweeping industry, go to WorldSweeper.com. You may reach the author of this article via email sent to: editor@worldsweeper.com.



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