

By Kevin Mercer and Don Huff

The Dirty Secret of Washing Your Car at Home

The greater Toronto area, North America's fourth largest city, has almost 2.2 million cars and other vehicles. Winter temperatures hover around -5 to -10°C (14° to 23°F), the range at which road-salt use is most common. From the first snow in early December, cars wear a distinctive dull brownish-white coating that salt imparts. Toronto drivers regularly frequent their local car washes to clean off the salt and grime; in winter, half of all car washes in southern Ontario take place at commercial establishments.

Come springtime, the ritual sponge, bucket, and hose return, and people wash their cars in driveways everywhere. After lawn watering, summer car washing produces the second largest demand for peak summer water use. The City of Toronto developed the Peak Pail program in 1997 to encourage water conservation while washing the car. For \$15, residents get a bucket, a sponge, a trigger nozzle, and other conservation devices. Unfortunately, the program failed to recognize that domestic lot-level car washing produces unregulated discharges of nonylphenol ethoxylate (NPE)-based detergents, greases and oils, heavy metals, and salts, most of which flow to storm sewers that discharge to local rivers and lakes.

In July 2000, after two years of legal drafting and public consultation, Toronto became the first North American city to regulate discharges to its sewers of federally regulated Tier 1 and 2 chemicals, including NPE. Sewer Use Bylaw 2000-457 is primarily aimed at eliminating persistent bioaccumulative substances from Toronto's sewage sludge or biosolids to ensure that they meet land application-use standards. It would also facilitate closure of the Ashbridges Bay sewage incinerator, the largest in the Great Lakes basin. The bylaw also targets storm-sewer discharges, making them meet similarly strict discharge limits and requiring industries violating the bylaw to prepare pollution prevention plans. The bylaw, however, exempts residential discharges.

Of course the bylaw was hotly contested, with the coatings industry, specialty chemical makers, dentists (large generators of mercury), and industry associations on one side and the World Wildlife Fund, watershed protection groups including RiverSides, anti-incineration advocates, and land-use advocates on the other.

As the debate over NPE limits continued, an unusual partnership began. Deputing in favor of NPE limits was the Canadian Carwash Association (CCA), which had already decided to phase out its use of NPE and similar surfactants. At city hall, the CCA argued that if commercial property runoff to storm sewers had to comply with the bylaw, then unregulated discharges of NPE-laden deter-

gents should comply too. The source it had in mind was domestic car washing in driveways.

Monitoring programs across North America have identified domestic car-washing discharges as significant detriments to dry-weather surface-water quality. Fort Worth, TX; King County and Bellevue, WA; and Calgary, AB, are among the cities that have identified residential car washing as having a deleterious impact on local water quality. Calgary has implemented Sewer Service Bylaw 24M96, which prohibits unregulated discharges from residential properties. Fort Worth requires mobile spray-wash businesses to have a discharge permit. Many cities are implementing runoff impact education programs, the most comprehensive of which is the City of Ottawa's WaterLinks/CommuneAUté program. (Our vote for best program bus-shelter poster is Bellevue's picture of a guy in wicked shorts washing his car on Puget Sound.)

Despite mounting evidence of its negative environmental impacts, domestic car washing remains exempt from the NPDES General Permit for Discharges from Small Municipal Separate Storm Sewer Systems. In Canada there is no acknowledgement of the impact of nonpoint-source NPE-laden discharges under the federal Fisheries Act or CEPA99. RiverSides has recommended that EPA rescind the car-wash discharge exemption, so far to no avail.

Since August 2000, RiverSides has been negotiating a partnership with the CCA to establish a program for CCA member businesses that highlights how communities can meet surface-water quality and water conservation objectives by encouraging the use of commercial car washes. RiverSides and its partner, Environmental Economics International, are preparing a Green Clean Strategy for the CCA, establishing an industry stewardship commitment to best management practices and focusing on building business/community partnerships to support community-based clean-water activities.

To combat unregulated lot level discharges, watershed protection groups and municipal decision-makers should view commercial car washes as community partners that can assist spreading the clean-water message to residents and community leaders. We strongly encourage clean-water advocates and municipal decision-makers to recognize the potential benefits of a partnership with local car-wash businesses and to include them in clean-water consultations and community initiatives. **O**

Kevin Mercer is executive director of RiverSides Stewardship Alliance in Toronto, ON. **Don Huff** is a partner at Environmental Economics International.