Sensor Deprivation

By STEVEN CHILLRUD, GREG O’MULLAN and WADE McGILLIS

At the suggestion of the federal Department of Homeland Security, New York City Council members have drafted legislation requiring anyone who has or uses a detector that measures chemical, biological or radioactive agents to get a license from the Police Department.

The purpose of the bill is to reduce unwarranted anxiety and damage from false alarms of terrorist attacks. Proponents say police officers need to know where detectors are and make sure they’re reliable. But the bill, which appears to be the first of its kind in the country and a model for other cities, could stifle the collection of environmental information vital to the public good.

The problem is that the bill as written would cover all “environmental sensors,” and in the extreme interpretation even laboratory analyses, used by students, teachers, researchers, activists, unions and many other groups. Their work has far more to do with ecology, education, public health and worker safety than with terrorism. These sensors allow them to measure things like greenhouse gases in order to document air pollution.

There are many examples of nongovernmental groups collecting important environmental data based on laboratory analyses. Indeed, the original identification of PCB contamination of the Hudson River did not come from the government but from a study by Sports Illustrated magazine that included data on striped bass collected from the river by a private citizen, Robert H. Boyle.

When a steam pipe exploded in Midtown Manhattan last year, scientists were able to quickly allay fears that asbestos was in the air. In the wake of 9/11, private groups using both hand-held particle sensors and samples that were analyzed in laboratories enabled us to better understand the health risks of the disaster. Future environmental and public health research will rely increasingly on sensors that immediately measure contaminant levels.

The hassle of getting a license that the police could deny or delay on any grounds — or simply not have time to process — could hamper or stop the flow of environmental data. It certainly wouldn’t be a wise use of our tax dollars to have them spent on issuing permits for monitors that have nothing to do with identifying terrorist activities.

Reducing false alarms may be a worthy purpose, but pushing through this legislation without clearly defining standards and policies doesn’t make sense. For example, the bill defines a biological agent as any microorganism or product of a microorganism that can cause “death, disease or other biological malfunction in a living organism, deterioration or poisoning of food or water, or deleterious alteration of the environment.” Such biological agents flood into local waters when rain storms make sewers overflow. So,
conceivably, a high school class wanting to measure the presence of fecal matter in river water would need a license. These definitions are simply too broad to be useful.

This bill relies upon judicious enforcement to counterbalance the all-encompassing language. Even though we believe that the current city administration would use the law rationally, once such a vaguely worded statute is passed, it opens the door for abuse. If it passes here, Homeland Security will probably use it as a model for other cities.

Since Sept. 11, 2001, the nation has looked to New York City on security issues. We must set the example. Restriction of environmental information is rarely in the public’s interest. The ability of scientists and citizens to gather data quickly and efficiently should be fostered, not suppressed.

The City Council should seek more public input and take its time in refining this legislation. It should expand the definition of detectors into different classes and make it clear that the legislation is applicable only to the class of real-time detectors that measure biological, chemical and radiological agents that would pose a danger to the public from terrorist activities or weapons of mass destruction. All other types of detectors should be exempted.

Indeed, one could consider not having any permits at all, even for those designed to detect terrorist attacks. And instead the legislation should focus on reporting procedures that would keep false alarms from snowballing into panic. That, after all, is what proponents say the purpose is.

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