## VCO Dialry by WCO Thomas Edwards

## Tracing a Pollution

Waterways conservation officers deal with many different events during the course of a career. One of the most difficult is pollution investigations. Notifications sometimes come quickly, such as a tractor-trailer accident, while others come days later and are almost impossible to trace to the source. We have seen just about everything when it comes to pollution, from expired milk, which was in a dumpster and crushed, causing the product to enter a nearby stream, to people changing their engine oil and allowing it to enter a storm drain.

Some pollutions are more dramatic, such as a 5,000-gallon tanker accident on an interstate, the contents of which entered our waterways, or the more recent train derailment in the Northcentral Region, which devastated more than 20 stream miles.

There are also times when you just get lucky. In my former patrol district, central Erie County and the city of Erie, I worked directly with the Erie County Department of Health. This department has a highly trained and dedicated staff of health inspectors who are always willing to assist in tracing and tracking pollution incidents.

Cascade Creek, in the city of Erie, seemed habitually to turn to foam after rainstorms, and the source of this pollution was always unknown. I notified Doug Ebert of the health department and together we tried to trace the pollution to its source.

When working in the city it is always helpful to have cooperation from the streets department for the purposes of pulling manhole covers and determining where lines run under the streets. In Erie we are very lucky because the City of Erie Streets Bureau is always willing to assist.

During one event, we were sure that we had tracked a chronic problem to a retention pond, which caught stormwater runoff from a parking lot. Samples were taken to determine the pollutants in the runoff water, and we were pretty sure that we had found the problem. Storm drains tend to meet in catch basins, or they all converge at a location before entering a waterway.

While tracing this pollution and awaiting a dye test, we encountered a slug of white material coming from another direction. Based on past experience, we were sure we knew the cause of this pollution. Mr. Ebert and I arrived at the suspected site approximately 10 minutes later and started searching for a source. One stormwater drain located on the company property seemed to be the entry point. This drain was very close to a spot

owner that he or she must correct it. Mr. Ebert always carries some testing dye with him, and after a couple of drops of some very neon-green dye, the waiting game began. We returned to where we had observed the problem, and along with some company staff, we waited for verification. About a half-hour later our investigation paid off, and the stream was neon green.

We returned to the company site and positively identified the problem to the owner. He was more than willing to take corrective action by sealing off the storm drain and improving his stormwater management plan for the site. Mr. Ebert submitted samples from the retention pond from our other investigation that day. The results came back about a week later and showed that the retention pond was not the source of our problem.

I still live in the city and occasionally pass Cascade Creek. WCO Stuart has taken over the central Erie patrol district and has had no instances of the stream turning to foam. Sometimes you just get lucky.



our waterways.

In this kind of event, it is always appropriate to be certain of the problem before absolutely stating to the



Pollution investigations can be difficult. Tracing a substance to its source requires sleuthlike work and cooperation among agencies, private individuals, and companies.