\$11 million study aims to assess Tonawanda Coke's effects

By Phil Fairbanks | News Staff Reporter | on July 19, 2014 - 4:39 PM

Even now, more than a year after Tonawanda Coke's criminal conviction, there remains a large and looming – and very much unanswered – question:

Did the company make people sick?

Researchers say a 10-year study into the health of 38,000 Tonawanda and Grand Island residents – a third of the population – should provide some answers to that ultimate question.

The \$11 million project, viewed as a potential landmark study, also will monitor current and former Tonawanda Coke employees.

Public health experts at the University at Buffalo say the "Tonawanda Health Study" will go a long way toward determining the company's effect on workers, neighbors and others exposed to its toxic emissions and hazardous waste.

"We won't be able to answer all the questions the community has, but I think we'll bring clarity to their concerns," said Matthew R. Bonner, an associate professor in University at Buffalo's Department of Epidemiology and Environmental Health.

Funded by the company as part of its federal court sentencing, the study aims to quantify, as much as possible, the public health impact of Tonawanda Coke's manufacturing operations.

A second study by UB, this one a soil investigation, will look at the environment in and around the company's River Road plant with an eye toward determining if ground contamination levels are high enough to pose a health risk.

The soil study also will determine if remediation is required anywhere in and around the Tonawanda Coke facility, and if further environmental controls are needed at the plant.

Like Bonner's public health study, UB's soil initiative is viewed as a key step in identifying possible connections between the company's emissions and people's ill health.

"We're hoping to start making those links," said Jackie James-Creedon, head of Citizen Science Community Resources and a founder of the Clean Air Coalition.

Both studies are on hold while Tonawanda Coke appeals its sentence, but the company continues to set aside money for the research.

In June, Chief U.S. District Judge William M. Skretny approved the company's request for a delay in the studies but required it make annual installment payments into a court-controlled account. The money – the first \$3.2 million installment is due next month – will remain in the account until the appeals court rules.

"It's not unusual for a defendant to ask for a stay of sentencing pending an appeal," said Daniel C. Oliverio, a Buffalo lawyer hired to handle the company's appeal.

The studies are being funded as part of Skretny's sentencing, but it was U.S. Attorney William J. Hochul Jr. and prosecutors Aaron J. Mango and Rocky Piaggione who first recommended the studies to the judge.

Not surprisingly, they view the continued funding of the studies, even while the appeal is being heard, as a victory.

"It's very appropriate," Hochul said, "that the company begin making payments for the studies."

Goal of 38,000 participants

When it comes to public health studies, there are more than a few models of excellence.

One of them is the Framingham Heart Study, viewed by many as a standard for the field. The project began in 1948 with 5,209 men and women in Framingham, Mass., and 66 years later is still ongoing.

The project, which now monitors the original participant's grandchildren, has been credited with helping to identify the major risks of heart disease, including high blood pressure, high cholesterol, smoking, obesity and lack of activity.

Like the Framingham study, the Tonawanda initiative will focus on a large pool of participants. Bonner says the goal is 38,000 people, about a third of the population of the Tonawandas and Grand Island.

"It's substantial," he said of the 38,000 figure. "The goal is to get as many people as we can, and then track them over time to see what and when diseases develop."

If Tonawanda Coke's appeal fails and the studies move forward, Bonner's team of researchers will begin with a baseline survey of current health conditions – cancer, heart disease, respiratory illness and kidney disease – in the Tonawandas and Grand Island.

The initial stages of the study also will investigate and ultimately characterize the community's ongoing exposure to benzene, a known carcinogen and one of the ingredients of coke-oven gas.

Ultimately, the goal is to determine the incidence of chronic diseases among residents and investigate possible links to pollutants coming from Tonawanda Coke.

In reality, it's an effort likely to go well beyond its initial 10-year time frame.

"The long-term goal is to monitor these people until the last person dies," Bonner said.

The study acknowledges that residents were not the only ones exposed to coke-oven gas. So were workers at the plant.

With the help of company records dating back to 1978, the year Tonawanda Coke started, researchers plan to monitor the health of former and current Tonawanda Coke employees.

The study's third and final component is an Environmental Health Education Center, an effort to connect the research with the community.

The center will remain open for the initial 10-year research period and serve as a community outreach and educational tool. It also will provide the means for researchers from both UB studies to work together.

Egregious conduct

In the eyes of prosecutors, Tonawanda Coke's criminal conduct was so egregious, it deserved a sufficiently severe punishment. Skretny agreed and, as part of his sentencing in March, ordered the company to set aside money for the studies over the next five years.

Tonawanda Coke's lawyers objected to the UB study, noting the results could be used by residents suing the company.

The judge's sentencing followed a four-week trial that ended with a jury's finding Tonawanda Coke guilty on 14 criminal charges. Mark L. Kamholz, the company's retired environmental controls manager, was found guilty on 15 charges.

The verdict followed testimony by more than 30 witnesses, many of them former and current Tonawanda Coke employees, who testified about toxic emissions and the improper handling of hazardous waste. The testimony included accounts of a little-known pressure-release valve that spewed coke-oven gas with benzene into the air.

Prosecutors also accused the company of using "quenching" or cooling towers that lacked necessary anti-pollution equipment and of illegally disposing of coal-tar sludge, one of the byproducts of its coking operation.

In the end, the jury found the company guilty of all but a handful of charges.

Skretny, in sentencing Tonawanda Coke, called its actions "singularly inexcusable" and left no doubt that he believes the company's financing of the UB studies is an appropriate punishment.

"The immediate long-term effects of this contamination are not easily discovered or quantified," he said, "but what is apparent, what is palpable, is that this community has suffered in the form

of unexplained medical conditions, unwanted property contamination and unknown future effects."

"Tonawanda has suffered," the judge added. "Grand Island has suffered."