

Testimony of
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Chairwoman Johnson, Ranking Member Baker, Congressman Hall and members of the House Water Resources Subcommittee, on behalf of Commissioner Grannis I want to thank you for providing me with the opportunity to testify at today's hearing. The topic of the hearing – Water Resources Contamination and Environmental Cleanup in the Hudson Valley is timely and important to New Yorkers.

The Hudson River and the Hudson Valley have a special importance to New Yorkers. This Valley, home to our national symbol, the bald eagle, has long been revered for its beauty, its value as a transportation route, and its contribution to the livelihood of those who live near its banks. Our Nation's history is intrinsically tied to Henry Hudson's travels up this River and major Revolutionary War battles at Saratoga and Stony Point. The Hudson Valley has spawned its own school of artwork, and our literature abounds with written and sometimes fanciful images that describe life along the Hudson. We all grew up with stories of Rip Van Winkle, Ichabod Crane, the Last of the Mohicans, and others that were based on life along the Hudson.

The attributes that have made the Hudson River great have also led to its significant environmental contamination. As a major transportation route for the Northeast, the Hudson River has suffered from the degradation caused by toxic contaminants released by industries located along its borders, including PCB contamination which continues to impair the River's health. I can't think of a better location to discuss our Nation's legacy of environmental

contamination and how it directly harms our water resources than to be in East Fishkill in beautiful Dutchess County.

Just as the Hudson River is important to our Nation's history and development, New York is important to the history of environmental contamination. It was at Love Canal in Western New York that we first learned of the harm which toxic pollutants can cause. That site became the genesis for the national and New York State Superfund laws which still govern our remediation of hazardous waste sites.

While we continue to use these omnibus statutes, our knowledge of environmental remediation has grown to embrace brownfields sites and contamination caused by vapor intrusion. In these areas as well, New York's experience offer guidance that I hope will be helpful to the Subcommittee.

Superfund, Oil Spills and Brownfields

In the late 1970's, the threat posed by historic industrial contamination was dramatically illustrated at Western New York's Love Canal, which became a worldwide symbol of our careless chemical past. As a result, laws were enacted at both the State and Federal level to regulate hazardous waste, criminalize its mishandling, and clean up contaminated sites posing the greatest risk to public health and the environment. Both the Federal and State superfund laws provided legal tools to prod "potentially responsible parties" into cleaning up these sites, or paying the government to do so. Our own state Superfund list of sites that pose a significant threat to the environment includes 2,266 sites, 1,390 of which have been remediated, leaving about 876 that are either being cleaned up or are still to be addressed.

Of the 2,266 sites, 86 are also on the National Priority List and, as such, are considered federal Superfund sites under the primary jurisdiction of USEPA. USEPA also provides assistance to New York State through its emergency removal program. Each year, NYSDEC requests that USEPA assist with about 25 emergency actions where the immediate removal of hazardous waste is necessary.

In addition to the State Superfund Program, NYSDEC also administers a petroleum spill response program with a similar mix of public and private expenditures for remedial efforts which primarily involve petroleum contamination. With about 16,000 new spills every year, this is not a small program. The current annual appropriation for this program is \$50 million.

Even with this level of effort and spending for cleanup programs, beginning in the early eighties it was becoming evident that there were many other contaminated sites that did not qualify for the Superfund and Spill Response Programs, but, because of fear of possible health impacts or other liabilities, were being abandoned with no hope of either cleanup or reuse. The fact that the cost of their cleanup can approach that of Superfund sites, ranging into the tens of millions of dollars, further discourages redevelopment. Some cities have done a rough count of the number of contaminated sites within their borders, but there is no complete or accurate inventory of these sites – now known as brownfields – though it is clear that they number in the thousands. And though they usually don't pose the same threat as Superfund sites, they often contain toxics of concern to the neighborhoods they scar, frequently threatening or causing groundwater or indoor air contamination as well.

With years of debate over what a New York brownfield program should look like – particularly in regard to cleanup standards – our State was late in its creation of a brownfields cleanup program. As the debate raged, many developers and landowners with contaminated but otherwise marketable property sought government review and “sign-off” of clean-up plans so that they could access financial backing and be freed from worry over potential legal actions under the State's pollution and hazardous waste laws. NYSDEC accommodated them with a “Voluntary Cleanup Program,” or VCP, under which NYSDEC staff would review clean up plans and offer Closure (“No Further Action”) Letters to those who completed approved remedial investigations and cleanup plans. Under the oversight of the State, 456 VCP sites have been or are being addressed. Of the 456 sites, 153 sites have been remediated and have received a Department release from liability.

The Brownfield Cleanup Program (BCP) was finally passed in 2003. It established cleanup goals and standards, offered liability relief to participants, and, most notably, provided for substantial “refundable” tax credits, meaning that if a participant's tax liability does not equal the credits available, the remainder would be given to the taxpayer as cash. To date, 390 sites have

applied to the BCP, with the number of applications growing each year. Forty-four have received a certificate of completion, meaning they have completed remediation except for any on-going operation and maintenance requirements or institutional controls. In addition to the State's Brownfield Cleanup Program, grants are available from USEPA to conduct planning and community involvement, create inventories, and carry out assessment and cleanup activities related to brownfield sites. Development projects around the State are benefiting from the State and federal programs, with some notable sites serving to lead an economic revival in the neighborhoods they used to burden with blight.

Experience shows that it is important that the suite of programs available at the State and federal level be fully funded and effective – whether they are grounded in enforcement or voluntary participation. In this regard, NYSDEC believes it is critical to restore full and ongoing funding for the federal Superfund. This will help to ensure that USEPA has the ability to comprehensively address NPL sites in New York in a timely and effective manner.

Reauthorization of the federal Superfund should be a top priority. Responsible parties are postponing the cleanup of their sites or otherwise entering into protracted discussions/negotiations with the USEPA. USEPA needs the funding to clean up these sites in the absence of cooperation with responsibility parties. USEPA's ability to do so can spur negotiation and, where negotiations fail, assure that the environment is protected – and the polluters are still on the hook for the government's costs.

It is equally important that the State and federal government enjoy a strong partnership in order to accomplish the shared goal of protecting public health and the environment from releases of hazardous wastes and substances. NYSDEC and USEPA Region 2 have developed such a positive partnership. NYSDEC generally handles contaminated sites through its State Superfund Program or one of its brownfield programs. This logically flows from the fact that our programs are well funded and mature. However, over time, we have concurred with listing some of the most seriously contaminated and complex sites on the NPL to bring USEPA funding and enforcement into play. USEPA takes the lead for cleanup of many of the NPL sites in New York and we work closely with USEPA on these sites through all phases of the remedial process.

One particularly important issue that has become a source of concern in the Hudson Valley and, indeed, around the State, is vapor intrusion related to contaminated sites and its potential impacts on surrounding communities.

Vapor Intrusion

“Vapor intrusion” refers to the process by which volatile chemicals move from a subsurface source into the indoor air of overlying or adjacent buildings. The subsurface source can either be contaminated groundwater or contaminated soil which releases vapors into the pore spaces in the soil.

Vapors can enter buildings in two different ways. In rare cases, vapor intrusion is the result of groundwater contamination which enters basements and releases volatile chemicals into the indoor air. In most cases, vapor intrusion is caused by contaminated vapors migrating through the soil directly into basements or foundation slabs. Although NYSDEC historically evaluated soil gas pathways, improvements in analytical techniques and the knowledge gained from remedial sites in New York and other states has increased our awareness of the prevalence of vapor intrusion exposures.

Contaminated soil vapor is not the only possible source of volatile chemicals in indoor air. Chemicals are part of our everyday life. Volatile chemicals are found in many household products, such as paints, glues, aerosol sprays, new carpeting or furniture, refrigerants and recently dry-cleaned clothing. Indoor air may also become affected through the infiltration of outdoor air containing volatile chemicals.

New York has emerged as a national leader in the field of vapor intrusion assessment. With the New York State Department of Health (NYSDOH), NYSDEC has developed a joint strategy to address this problem Statewide. For ongoing sites where final cleanup decisions have not been made, the vapor intrusion pathway will be evaluated as part of the site investigation along with other media, such as groundwater and soil. For sites where cleanup decisions were made before January 1, 2003, NYSDEC has developed a process to evaluate the potential for vapor intrusion

and, where the potential exists, to investigate and mitigate possible exposures. We have identified 421 of these older sites where volatile organic compounds, or VOCs, were known to exist. To date, evaluations have been commenced at all but 32 of the 421 sites. USEPA has taken the lead at all former and current NPL sites impacted by vapor intrusion, 55 of the 421 “legacy sites,” and has begun addressing all of them. Dr. Carlson from the New York State Department of Health will discuss vapor intrusion in his remarks as well.

There are a number of sites contaminated with vapor intrusion in the Hudson Valley, including industrial sites, landfills and cleaners. Included in these sites are the Old Al Turi Landfill and the Orange County landfill, the Texaco Research Center, and Pawling Rubber Company. Each of these sites presents its own challenges, requiring carefully tailored remedial plans.

In all cases, NYSDEC and USEPA work cooperatively to address vapor intrusion at these sites. For example, a vapor intrusion site of particular concern in the Hudson Valley is the Hopewell Precision Area NPL Site in Hopewell Junction. NYSDEC is working closely with USEPA to investigate vapor intrusion impacts from this site and to implement critical measures such as water treatment, ventilation systems and monitoring to protect public health and the environment.

The Toxic Chemical Exposure Reduction Act of 2008

We greatly appreciate Congressional recognition of the problem of vapor intrusion, and the added cost and complication it represents in cleaning up contaminated sites. Congressman Hall’s bill, H.R. 5527, will assist the states in their efforts to remediate vapor intrusion sites by requiring USEPA to publish a health advisory for trichloroethylene that fully protects susceptible populations such as pregnant women, infants and children. The bill also would require USEPA to promulgate a national primary drinking water regulation for TCE.

Let me note that in New York we already have well-thought out guidance on the remediation of vapor intrusion sites, which NYSDOH can best address. As I mentioned before, New York has been a training ground for environmental remediation efforts probably to a much greater extent

than we would like. As a result, we don't really need a federal standard in New York ... but, at the same time, the New York members of the US House of Representatives can certainly guide the House as a whole on how best to establish a nationwide standard for TCE.

I would like to note that the development of the appropriate risk concentration for TCE has been quite controversial. A few years ago, USEPA proposed a value of 0.25 micrograms/meter³, which was challenged by industry and the Department of Defense. Ultimately, the National Academy of Sciences agreed with USEPA's methodology but suggested they do more work before finalizing a reference concentration. USEPA is now working to come up with a new value. I urge the Subcommittee to work with EPA to ensure that the standard that would be required by H.R. 5527 adequately meets the needs of state health and environmental agencies.

In New York, the vapor intrusion guidance promulgated by NYSDOH established a guideline value of 5 ug/m³ for TCE, but includes recommendations for mitigation of homes at low or undetectable levels in indoor air if the subslab concentrations are sufficiently elevated. In other words, we often mitigate structures based on the potential for exposures not just current exposures. I'm sure that Dr. Carlson would be happy to join NYSDEC in providing additional information on New York's guidance for the Subcommittee.

Conclusion

Chairwoman Johnson and members of the Subcommittee, I would like to thank you again for coming to New York to learn about our experiences with water resource contamination and cleanup efforts. Without a doubt, New York has been a "laboratory" for these activities, and there is no better place to discuss them than in the historic Hudson Valley. On behalf of Commissioner Grannis, I would like to thank you again for allowing me to testify, and I'd be happy to answer any questions that you have.