

Oral Testimony of Evan P. Hansen

Before the Committee on Environment and Public Works United States Senate

March 6, 2014

Hearing on Preventing Potential Chemical Threats and Improving Safety: Oversight of the President's Executive Order on Improving Chemical Facility Safety and Security

Chairman Boxer, Ranking Member Vitter, and members of the committee, thank you for the opportunity to testify.

I am president of Downstream Strategies, an environmental consulting firm in West Virginia. Since 1997, we have worked with government agencies, nonprofits, and others on issues related to energy and water, science and policy.

On January 9, a chemical leak was discovered about one and a half miles upstream from the intake for West Virginia's largest public water system. The leak was occurring from Freedom Industries, a chemical storage facility near Charleston. Secondary containment failed, and 10,000 gallons of chemicals reached the Elk River. These chemicals were drawn into the drinking water plant and contaminated the water supply for more than 300,000 people. Businesses were closed, schools were shut, and hundreds sought medical attention.

In response, I coauthored a report entitled "The Freedom Industries Spill: Lessons Learned and Needed Reforms," which provides recommendations to prevent contamination of public water systems in the future.

I then coauthored a second report entitled "Potential Significant Contaminant Sources above West Virginia American Water's Charleston Intake," which documents the range of potential water quality risks above the intake on the Elk River.

I would now like to address three existing federal authorities with relevance to the President's Executive Order on Improving Chemical Facility Safety and Security.

The first includes Spill Prevention, Control, and Countermeasure, or SPCC, requirements. The Freedom site was not subject to SPCC because these rules only apply to oil facilities. If SPCC rules had applied to chemical

storage facilities, the risk of the Freedom leak occurring would have been significantly reduced. And if a leak did occur, specific planning and procedures would have already existed to respond rapidly and appropriately. New regulations using existing authorities could widen the applicability of SPCC to include not just oil facilities, but also other facilities that store hazardous substances.

The second federal authority, the Safe Drinking Water Act, provides a planning process to address risks to drinking water. Public water systems must create Source Water Assessment Reports, which delineate a zone of critical concern: the river corridor immediately upstream from the intake that warrants more detailed management because spills in this zone would quickly reach the intake. These Assessment Reports also inventory potential significant contaminant sources within these zones.

The Act, however, does not mandate that public water systems take the next step to develop Source Water Protection Plans. Protection Plans build upon Assessment Reports and require planning for alternative water sources, contingency planning should contamination occur, and management planning to minimize risks.

The Chemical Safety and Drinking Water Protection Act would require additional oversight and inspections of chemical storage facilities under the Safe Drinking Water Act. An inventory of facilities would be created, information would be shared with downstream water systems, and minimum standards would be set for state programs. These are all important steps toward improving chemical safety.

However, I suggest that additional measures be taken to protect intakes against all potential risks. It should be mandatory for public water systems to create Protection Plans, and both Assessment Reports and Protection Plans should be periodically updated. Finally, all facilities upstream from intakes should be required to share pollution-related plans with downstream water systems.

Under the third federal authority, the National Pollutant Discharge Elimination System or NPDES, permits are typically required for operations such as chemical facilities with aboveground storage tanks. Freedom held such a permit, but did not appear to follow the management practices it required, nor did they immediately report the spill. In addition, the West Virginia Department of Environmental Protection did not inspect the site under NPDES and did not review Freedom's stormwater pollution prevention plan or groundwater protection plan as required.

I encourage the use of existing authorities to make individual permits mandatory for facilities within zones of critical concern. Individual permits must undergo public notice and comment and would allow regulatory agencies to include site-specific conditions to protect source water. In addition, I encourage a requirement for annual inspections at NPDES-permitted facilities within zones of critical concern.

Thank you.