

**Testimony of R. Peter Weaver
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Before the

**Senate Committee on Environment and Public Works
Subcommittee on Water and Wildlife**

**EXAMINATION OF THE SAFETY AND SECURITY OF DRINKING WATER SUPPLIES FOLLOWING THE
CENTRAL WEST VIRGINIA DRINKING WATER CRISIS**

FEBRUARY 3, 2014

Introduction

The International Liquid Terminals Association (ILTA) is an international trade association that represents eighty commercial operators of aboveground liquid storage terminals. These facilities serve various modes of bulk transportation including marine vessels, pipelines, tank trucks and railcars. Operating in all fifty states, ILTA member companies own approximately eight hundred domestic terminal facilities and handle a wide range of liquid commodities including chemicals, biofuels, crude oil, refined petroleum products, fertilizers, and vegetable oils. Terminal customers who store products at these facilities include chemical manufacturers, oil companies, petroleum refiners, utilities, food producers, airlines and other transportation companies, commodity brokers, government agencies, and military bases. ILTA and its members are committed to the safe and environmentally sound operation of terminal facilities. ILTA appreciates the opportunity to provide testimony during this hearing.

Laws and Regulations Governing ILTA Member Facilities

Like the vast majority of bulk storage tank operators, ILTA members are regulated by an extensive series of laws and regulations. These are fairly comprehensive, and rigorously enforced by municipal, state, regional, and/or federal governmental agencies. Facility inspections don't end with the regulator; they are also conducted by other entities. At terminals, these notably include the facility's customers who themselves have a vested interest in the proper handling and safe storage of their products.

At the federal level, rules for environmental protection, as well as safety and security, have been promulgated in response to numerous laws, including CWA, OPA '90, CAA, CERCLA, RCRA, SDWA, SARA, HMTA, TSCA, OSH Act, MTSA, HSAA Sec. 550, and EPCRA. There are also state laws which carry additional requirements. In addition to meeting minimum compliance obligations, terminal facilities

follow industry standards and best practices for designing and maintaining the integrity of their equipment and operations.

All of the approximately 800 domestic ILTA member facilities are subject to regulations that require their storage tanks to be inspected periodically. Their tanks are all located within secondary containment structures to prevent product migration in the event of a tank failure. Freedom Industries is not a member of ILTA. Early reports suggest that the Freedom facility may not have been subject to the same level of environmental protection regulation that is uniformly applicable to ILTA members. As such, Freedom Industries may be substantially different from the vast majority of storage tank operators in this country.

Specific examples of regulations governing storage tank operators include the following federal programs:

40 CFR 112. Spill Prevention, Control and Countermeasure (SPCC) Regulations. Impacting all oil products, and numerous chemicals that exhibit similar properties, the SPCC rule applies to every facility possessing 1,320 gallons of oil in aggregate, or greater. It requires tank and pipeline integrity testing and strictly regulates the size and effectiveness of secondary containment structures. SPCC Plans must be certified by a Professional Engineer. Initially established in 1974, this rule has been revised and expanded multiple times since that date. The latest new provisions went into full effect in 2013.

Adherence to robust industry standards is required by SPCC, such as the American Petroleum Institute (API) Standard 653 for integrity inspections of large field-erected tanks, and Steel Tank Institute Standard SP001 for “trailerable” shop-built tanks. The National Fire Protection Association (NFPA) Code 30 for flammable and combustible liquids is another. State-specific regulations that impact aboveground storage tank facilities must be taken into account in the preparation of an SPCC Plan. In all 50 states, SPCC regulations are in force; some states have additional spill prevention provisions that exceed federal requirements.

40 CFR 112, 33 CFR 154. Facility Response Plan (FRP) Regulations. The Oil Pollution Act of 1990 contains FRP requirements which specifically include provisions that require covered facilities to list any downstream drinking water intakes that may be impacted in the event of an oil or chemical release, as well as to list potentially vulnerable environmentally sensitive areas.

40 CFR 122 - 126. Pursuant to the Clean Water Act, it is most common for hazardous material storage tank operators to have a National Pollutant Discharge and Elimination System (NPDES) Permit governing discharges of storm water or waste water from their facility. The permit specifies stringent discharge limits to meet Safe Water Drinking Act (SWDA) requirements for applicable chemicals or contaminants. Discharge monitoring reports are typically required.

40 CFR 260 - 265. EPA regulations promulgated in response to the Resource Conservation and Recovery Act specifically require that adequate secondary containment be provided and applicable equipment inspections be completed for all hazardous waste materials.

40 CFR 355, 370. EPA regulations promulgated in response to the Emergency Planning and Community Right-to-Know Act (EPCRA, also Title 3 of the Superfund Amendments and Reauthorization Act) specifically require that a chemical inventory be submitted to the local emergency planning committee or department, state emergency response committee or agency, and to the local fire department.

40 CFR 302. EPA regulations governing hazardous substances designate the specific reportable quantities in the event of release.

49 CFR 194, 195. DOT regulations governing storage tanks at pipeline facilities specifically require that sensitive environments and drinking water intakes downstream of the installation are identified. These rules also require spill response equipment to be effectively deployed in the event of a release.

29 CFR 1910, 1926. OSHA regulations require employees to ensure that workers have an adequate understanding of all chemical safety hazards and suitable personal protective equipment.

Additionally, in the state of West Virginia, aboveground storage tanks are regulated by 47 CSR 58. Section 4.8.a of this regulation requires sufficient secondary containment for aboveground storage tanks containing product that has the potential to contaminate groundwater. Adequate containment must protect groundwater for no less than seventy-two (72) hours. It is ILTA's understanding that other West Virginia agencies have also taken requirements from the State Ground Water Program and adapted them to their specific authorities.

Freedom Industry Investigation

On January 9, 2014, several thousand gallons of a chemical product¹ escaped through a one-inch hole in the bottom of a 40,000 gallon stainless steel storage tank owned and operated by Freedom Industries in Charleston, West Virginia. The material escaped any containment and migrated into the Elk River approximately 1 mile upstream of the West Virginia American Water municipal intake. It is ILTA's understanding that various state and federal agencies as well as the Chemical Safety Board are presently investigating the incident. Given the impact of this release to the surrounding community, there is no question that the Freedom Industry site will be subject to extensive inspections, both of the facility and its operations. Any resulting incident reports regarding the circumstances surrounding this event would be expected to cite the primary and secondary contributors to the release, as well as identify applicable regulatory programs. ILTA is interested in the findings from such reports, and in particular how the chemical escaped containment and migrated to the waterway.

Conclusion

Even with an expansive net of regulatory requirements, anomalous circumstances exist where an incident such as this can occur. It is ILTA's contention that the first step in a proper oversight response requires an understanding of those circumstances within which it was allowed. As such, ILTA also contends that federal legislative action in response to Elk River at this moment would be premature. Once final investigation reports are released, the specific reason(s) for the failure of the tank and of its

¹ 4-methylcyclohexanemethanol (MCHM)

secondary containment will be available for analysis. With this information, measures necessary to prevent future recurrence would be most effectively accomplished through a refinement and simplification of existing regulations.

If Freedom Industries disregarded existing regulations, company operating procedures, and/or industry standards, the most effective response would be stronger enforcement rather than the promulgation of new legislation and subsequent regulation.

ILTA COMMENTS ON SEC. 1472(b)(2) OF THE CHEMICAL SAFETY AND DRINKING WATER PROTECTION ACT OF 2014 (S 1961)

The Senate bill includes provisions for minimum requirements to protect water systems from the release of chemicals from a storage facility. ILTA has the following comments on these provisions:

“(A)(i) acceptable standards of good design, construction, or maintenance;

- ✓ Storage tank design, construction and maintenance standards already exist (e.g., 40 *CFR* 112 and NFPA Code 30). Tanks are subject to both existing construction and inspection standards. API Standards 620 and 650 are routinely adhered to for the construction of both petroleum and chemical tanks throughout the industry pursuant to existing regulations and company operating procedures.

“(ii) leak detection;

- ✓ Storage tank and secondary containment leak detection standards already exist. Leak detection cannot be labeled as a sole prevention means of incident prevention. However, leak detection provisions can be a mitigating factor and already exist within the oil and chemical industry (e.g. 40 *CFR* 112). At some facilities, Process Safety Management provisions (29 *CFR* 1910.119) also govern facility equipment inspection.

“(iii) spill and overfill control;

- ✓ Spill and overfill standards already exist. Secondary containment and overfill protection equipment must be in place at hazardous material storage facilities. All such equipment requires routine, periodic inspections. Sufficient variance and loss provisions in industry standards have long been established in the oil and chemical industry (e.g. API Standard 2350 for tank overfill protection).

“(iv) inventory control;

- ✓ Inventory control standards already exist. Hazardous material storage facilities steward and regularly measure product inventories and routinely conduct an accounting reconciliation for all stored product. Storage tanks may also be affixed with measuring devices, such as side-mounted level gauges, that augment the manual measurement of tank inventory volumes pursuant to 40 *CFR* 112.

“(v) an emergency response and communication plan;

- ✓ Emergency response and communication planning requirements already exist. In addition to basic facility security measures, an OSHA Emergency Action Plan (29 *CFR* 1910.38), governing

emergency response and evacuation associated with personnel safety, is routinely found to be in place at storage facilities along with an OSHA Hazard Communication Plan (29 *CFR* 1910.1200).

“(vi) an employee training and safety plan;

- ✓ Employee training and safety planning requirements already exist. Employee training and safety plans are prominent at aboveground storage tank facilities pursuant to OSHA personal protection equipment requirements (29 *CFR* 1910.32) and other general health and safety plan provisions (29 *CFR* 1926, e.g. equipment access).

“(vii) an inspection of the integrity of each covered chemical storage facility;

- ✓ Chemical storage integrity testing standards and requirements already exist. API 653 is a primary industry standard for storage tank inspection. Facilities possessing oil and oil-like products are all required to conduct such testing pursuant to SPCC (40 *CFR* 112).

“(viii) lifecycle maintenance, including corrosion protection;

- ✓ Chemical storage maintenance provisions already exist. In addition to routine facility maintenance practices, chemical storage may also have a cathodic-protection system (corrosion protection rectifier equipment) for products that may induce a higher rate of corrosion to tank metal, or that may be subject to soil or environmental conditions that can cause excessive corrosion. Consideration is given to API Recommended Practice 575, Inspection of Atmospheric & Low Pressure Storage Tanks, for example.

“(ix) notice to the Administrator, the appropriate State agency, and applicable public water systems of—

“(I) the potential toxicity of the stored chemicals to humans and the environment;

- ✓ The toxicity of stored chemicals to humans and the environment is presently taken into account. Each liquid stored must have a Safety Data Sheet (SDS or MSDS) pursuant to 29 *CFR* 1910.1200.

“(II) safeguards or other precautions that can be taken to detect, mitigate, or otherwise limit the adverse effects of a release of the stored chemicals;

- ✓ Safeguards to detect, mitigate, or limit adverse chemical effects presently exist. In addition to OSHA requirements governing SDS information (29 *CFR* 1910.1200), personnel protection is required pursuant to 29 *CFR* 1926 provisions. Pursuant to state criteria, including Safe Drinking Water Act standards, water discharges are monitored against allowable pollutant limits under the National Pollutant Discharge Elimination System (40 *CFR* 122-126).

“(x) financial responsibility requirements, including proof of insurance, bond, or other similar instrument;

- ✓ Chemical facilities typically have financial responsibility requirements in place including insurance governing both sudden and accidental and slow release/seepage insurance pursuant to state and municipal requirements.

“(B) inspections of covered chemical storage facilities, [within the same watershed as the public water system];

- ✓ Facilities possessing oil and oil-like products are all subject to inspections pursuant to SPCC (40 *CFR* 112).

“(C) a comprehensive inventory of the covered chemical storage facilities in each State.

- ✓ Facilities are required to possess an SDS for each hazardous product that is handled or stored on site pursuant to OSHA hazard communication rules (29 *CFR* 1910.1200). Community Right-to-Know reporting requirements (40 *CFR* 370.32) demand that all such SDS are filed with state and local emergency planners, as well as the local fire department, within 60 days.

Thank you for the opportunity to appear before you today. I would be pleased to respond to any questions.