

**TENNESSEE RIVERKEEPER®**

P.O. Box 2594  
Decatur, Alabama 35602

Telephone: (205) 516-9350  
Info@TennesseeRiver.org

February 11, 2011

Mr. Roger Donovan  
Tennessee Department of Environment and Conservation  
Division of Solid Waste Management  
5<sup>th</sup> Floor L & C Annex  
401 Church Street  
Nashville, TN 37243-1534

Subject: Permit TNHW-105 Modification (Velsicol Chemical LLC)

Dear Mr. Donovan:

We OPPOSE the permit modification for Velsicol Chemical LLC at their Chattanooga site issued for comment by the Tennessee Department of Environment and Conservation (TDEC) under the Tennessee Hazardous Waste Management Act of 1977, as amended, Tenn. Code Ann. § 68-212-101. The purpose of the permit modification is to define the final corrective action requirements for the facility's solid waste management units and areas of concern. The final corrective action proposed in the TDEC Fact Sheet is inadequate to protect and ensure the public health, the aquatic resources, and the safety of the surrounding community.

We are writing on behalf of Tennessee Riverkeeper, a non-profit organization dedicated to protecting the Tennessee River and its tributaries by enforcing environmental laws and educating the public. We advocate for the watershed to ensure that future generations will inherit safe, clean water in their communities. The Velsicol Chattanooga site is located in the flood plain of Chattanooga Creek, a tributary of the Tennessee River.

Velsicol Chemical is liable and fully responsible for damages, response costs, corrective actions and cleanup costs under both federal and state law for the contamination of their Chattanooga site. Instead of requiring full removal and clean up of site contaminants to restore the property to recreational end-use standards, the proposed permit modification essentially lets Velsicol off the hook. Instead of actively implementing their oversight responsibilities, TDEC is just rubber-stamping the inadequate remediation plan submitted by Velsicol.

As their proposed “final corrective action,” Velsicol must merely install clean cover of 12”-18” of soil over contaminated soils and sediments. According to TDEC, that cover will serve as a barrier to human exposure and for containment of the underlying contaminated soil. The site will be fenced and the deed will contain restrictive covenants limiting the future of the site to industrial uses. Velsicol will continue groundwater and contaminant monitoring and recovery operations at one area of the plant where a large ground sink of coal tar was discovered. The company also must continue to monitor and remove contaminants at Piney Woods Spring, a natural spring near the Piney Woods park and playground.

We believe that this “final corrective action” represents a missed opportunity to ensure that the site is properly cleaned up, in this generation, and by the responsible party.

### **Background**

The unfortunate history of the Velsicol Chattanooga site is not in dispute. The facility’s soil and groundwater have been polluted by years of hazardous waste stored and disposed of on-site. The plant on the site before Velsicol produced coal tar and ferroalloy. (Coal tar is used for asphalt, and ferroalloy is a blend of iron and other metals.) The Velsicol plant produced benzoic acid and derivatives and chlorinated toluene-based products, which are used in food preservatives, pesticides, herbicides and plastics. The site is polluted with over 150 known contaminants, including benzoic acid, benzene, ammonia, coal tar and chloride. Benzene causes cancer in humans, according to the U.S. Centers for Disease Control and Prevention.

EPA and TDEC completed a RCRA Facility Assessment of the site in 1990. The levels of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides and metals contained in the soil and water were found to exceed maximum contaminant levels for drinking water standards and soil contaminant levels. VOCs and SVOCs can cause eye, nose, and throat irritation, headaches, loss of coordination, nausea, and damage to liver, kidney, and central nervous systems. Some of these compounds can cause cancer in animals; some are suspected or known to cause cancer in humans. Metal contamination is linked to auto-immune diseases and certain neurological disorders. More than ever, heavy metals are being linked to many forms of cancer.

Velsicol subsequently completed three phases of RCRA Facility Investigations, two Interim Measures construction projects and a Corrective Measures Study to address some of the contamination at the site. News reports suggest that to date, Velsicol has removed some 24 million pounds of waste, which does not appear to be much given that large scale site cleanups often have removed over 100,000 tons of waste.

However, it also cannot be disputed that significant contamination remains. We believe that the toxic pollutants that have long infiltrated the site are simply too dangerous to risk remediating with just a bare soil cover.

### **Velsicol's Proposed "Final Corrective Action"**

In arriving at their proposed "final corrective action," Velsicol considered four alternatives. Their favored proposal, the "Soil Cover Alternative," was characterized by them as "fully protective of human health and the environment." However, we have doubt as to the ingenuity of this conclusion, which relies on assertions that ground water will be fully contained and soil cover be permanently and effectively maintained. Both of these factors are doubtful. Ground water is notoriously difficult to predict. Without impermeable underlining barriers and effective collection systems, leachate from buried waste cannot be reliably contained. Toxic and hazardous liquids may be traveling into the deeper limestone aquifer in conduits which would mean it would never reach the Velsicol recovery wells at all.

A soil cover of the proposed 12 to 18" depth can erode or be disturbed if the site is reused, as has been proposed. Also, as the Sierra Club has stated in their comments, during the summer months the hot and dry weather may lead this soil to crack, as is common in the area, exposing pollutants which may then become airborne and be released from the site.

We note that, as a practical matter, the incomplete and inadequate clean up will hamper efforts to return the property to productive use for the community. As quoted in a January 14, 2011 newspaper article Velsicol's senior environmental projects manager Gary Hermann openly acknowledges the final corrective action plan is not designed to completely clean up the site. He went on to say if a new industry expresses interest in the site, its leadership can decide how much more work is needed there. It is hard to imagine any industry that would want to operate at a hazardous waste site that has not been fully remediated. Moreover, if the site is redeveloped, how does TDEC expect 12-18 inches of soil to prevent exposure? A soil cap of this depth may not survive during site reuse.

A further serious problem with this proposal is the discharge of collected contaminated storm and ground water into the sewer system to be treated at the Moccasin Bend Wastewater Treatment Plant. An official at that plant has been quoted as saying "We do not test for pesticides...there are certain concentrated amounts of these chemicals that are not detected." Furthermore, this plant has had numerous and notorious bypasses and overflows in recent years. It goes without saying that if these harmful pollutants are not effectively removed by the plant

they are discharged directly into the Tennessee River. All water collected on-site should be effectively pre-treated on-site before being released into the sewer system.

Perhaps telling of the reason for Velsicol's preference for the "Soil Cover Alternative," is their statement that it is the "most cost effective." This, of course, is just another way of saying that it saves them money. Velsicol should not be allowed to just choose the cheapest alternative; they should be held to the alternative most protective of the environment.

### **Our Preference**

We prefer the "Excavation with Off-Site Landfill Disposal Alternative." Velsicol dismisses this one saying it "increased the risk of exposures and releases related to transportation to and disposal in a landfill." While this is a valid concern, the risks can be minimized with proper precautions. This method minimizes the risk of migration of leachate from the containment site and is, thus, most protective of groundwater. It also has the advantage of removing contaminants from an already impacted community.

Our second preference is the "Asphalt Pavement Cover Alternative." This method is more protective of groundwater than the soil cover alternative. However, it is less protective than the off-site landfill disposal alternative due to the possibility of leaks in the asphalt cover. It also has the disadvantage of leaving contaminants in the affected community. While Velsicol states concerns about peak stormwater discharge rates, this can be controlled with adequate collection methods.

### **Environmental Justice Concerns**

One study, twenty years ago, stated: "People living at or near [Chattanooga] creek may be at increased risk for adverse health effects. These effects may include an increased risk for some types of cancer (including skin and lung cancer, and leukemia), skin irritations, gastrointestinal upset, and neurological disorders...A review of cancer statistics for zip codes 37410 and 37409 for 1988-1990 indicate a statistically significant increase in rates of lung, pancreatic, and colon cancer." (ATSDR, 1994). Currently, the EPA ECHO website notes that the population surrounding the Velsicol facility is 37.4% minority and 25% are below the poverty line. As another commenter has stated, "On January 6, 2011 a TDEC official at the community hearing at the Bethlehem Community Center said that a more thorough cleanup would be done in a more affluent area but that it was acceptable to do the proposed minimal cleanup in the poor South Chattanooga community where the Velsicol site is located." Frankly, the people of this

community have had enough. Justice demands that this site receive the most effective clean-up possible, both for the current generation and for generations into the future.

Sincerely,

Mark E. Martin  
Attorney at Law  
Tennessee Riverkeeper

David P. Whiteside  
Riverkeeper and Executive Director  
Tennessee Riverkeeper