Monday, August 30, 2010

**David Pais** 

Comments to Joint City/County Koppers Public Hearing

The proposed EPA plan for remediation of the Koppers site is seriously deficient and fails to resolve important safety and health issues and fails to ensure adequate protection of the cities' well field.

In fact, after waiting over 20 years for an effective clean up, we are presented with a defective plan which suffers from many of the same errors of the previous plan, presented over a decade ago. Namely, it fails to address the porous and fissured nature of the Hawthorne soils that are the only barrier between these toxins and the Aquifer.

I urge the commission instruct staff to reject all efforts to consolidate contaminated soils, collected both on and off site, into a permanent toxic containment mound which will restrict future uses of the site and will continue to present adverse economic and environmental impacts to adjacent neighborhood and businesses.

Specifically, the proposed primary remedy for treatment of the source areas relies on an unproven technology, ISBS, of which Gainesville will become the first "beta" test case in Florida. Even industry trade publication raises questions as to its effectiveness and safety of this application. (1) The proposed plan involves leaving all of the 80 years of accumulated toxic DNAPL compounds in place and injecting large amounts of a new chemical into our ground water with hopes of stabilizing and encrusting the mass. This technology was first proposed in the late 90's and has a very limited track record, with the Koppers site being one of the first pilot test cases in 2006. The results of this pilot test were less than encouraging, although now we are asked to trust Beazer East, which coincidently has heavily invested in this technology as a remedy for other sites, in the largest scale application ever attempted, with protecting our Aquifer and drinking water from the impending

plume of toxic contaminants moving toward our well fields, which include naphthalene- the active ingredient in moth balls.

This proposed technology will involve injecting thousands of pounds of a proprietary chemical, REMOX EC, into our groundwater, which even the technical trade publication by the distributor, Adventus, acknowledges "problems with distribution of the product throughout the source zones, poor predictability of performance and serious health and safety issues." (2) Furthermore, additional potential hazards include the production of noxious fumes, including hydrogen sulfide and methane, an increase in total dissolved solids and by product metals including manganese, iron, cadmium, chromium, lead, and arsenic all in quantities above the state drinking water standards. The "unintended consequences" of this "experimental approach" could result in additional contamination of our aquifer and drinking water supplies for years to come. The analogy of the extensive use of chemical dispersants in the Gulf Oil Spill with yet to be determined environmental impacts, seems appropriate, yet in this case we are gambling directly with the safety of our drinking water.

It is unconscionable and irresponsible for the EPA not to require of Beazer East the most aggressive, comprehensive, and state of the art cleanup methods for this site. Other more effective methods which exist, such as steam extraction or excavation, were rejected as being too costly, in favor of a quick and easy fix.

I ask Mr. Miller, Do we gamble with a unproven methodology in order to save money? And what is the true cost of ensuring clean and healthy drinking water for the citizens of Gainesville?

And Mr. Brourman, after almost a century of Koppers Industries fowling our ground water and creeks, contaminating of soils and homes, jeopardizing the health and safety of our citizens-externalizing all of these costs and sacrificing our community's well-

being on the alter corporate profit- is it not time to step up to the plate and finally clean up your mess, once and for all. The citizens of Gainesville deserve a comprehensive cleanup of this site and not a half baked cover-up.

I urge the commissions to do everything within you authority, including instructing the city and county attorney's offices to pursue legal remedies should the EPA not adequately respond to citizen and staff requests and insist on a more comprehensive and through approach including a new proposed cleanup plan.

We demand better than this. There is only one opportunity to clean this site correctly and begin to restore the health and wholeness of this community and the area we know as our home.

## **Appendix:**

1. <a href="http://www.adventusgroup.com/pdfs/ISBS%20generic%20white%20paper%20oct%202008\_Final.pdf">http://www.adventusgroup.com/pdfs/ISBS%20generic%20white%20paper%20oct%202008\_Final.pdf</a>

In Situ Biogeochemical Stabilization (ISBS) Technology for Source Area Management Adventus Americas Inc. October 23, 2008

All of these ISCO-based remedial technologies are challenged by similar issues, namely; difficulty in establishing effective distribution and reactivity (need to get catalysts, reagents and COI to combine *in situ*), rather poor predictability of performance (rebound; kinetics of reactions), and potentially serious health & safety issues.

http://www.itrcweb.org/Documents/bioDNPL\_Docs/BioDNAPL3.pdf

## 3.4 Threshold Scenarios/Conditions: Potential Show-Stoppers

Scenario 1: Large Volumes of Mobile DNAPL, Inaccessible DNAPL Mass. Source zones with

Large volumes of mobile DNAPL are generally not suitable for ISB treatment of the DNAPL source without first implementing some level of physical DNAPL removal.

Scenario 4: Proximity of Sensitive Receptors (Buildings/Well Fields). Sites where the source area is near sensitive receptors may not be appropriate for ISB. For example, if the source area is too close to an operating municipal well field, the risk of daughter products or anaerobic water containing dissolved metals or organic carbon reaching the production wells may be too great to consider ISB as a standalone remedy. In these cases, other remediation technologies should be considered.

Technical/Regulatory Guidance In Situ Bioremediation of Chlorinated Ethene: DNAPL Source Zones

June 2008 Prepared by The Interstate Technology & Regulatory Council Bioremediation of DNAPLs Team