November 30, 2011

Carlos A. Sanchez
Chief, AR/TX Section
Region 6, Superfund Division (6SF-RA)
United States Environmental Protection Agency
1445 Ross Avenue
Dallas TX 75202-2733

RE: ARKWOOD, INC. SUPERFUND SITE
EPA ID: ARD084930148
Site ID: 0600124

Dear Mr. Sanchez,

I would like to return to the issue of the design and implementation of the groundwater remedy at the Arkwood site. I put forth the following questions in hopes you can help me begin to understand the groundwater remedy's history and EPA/ADEQ involvement in and approval of the groundwater remedy's concept, design, construction, operation, efficacy and reporting and continued justification of the groundwater remediation operations taking place onsite at the Arkwood, Inc. property.

My biggest concern at present is surrounding the "injection system" onsite, as obviously its presence will make the return to productive use of Arkwood more complicated than if the "injection system" operations could be discontinued, its apparatus removed and the wells McKesson Corporation drilled to build it carefully filled and capped to EPA and ADEQ specifications.

In the documentation, the water injection system onsite at Arkwood has been referred to by McKesson Corporation employees and contractors and by the EPA Remedial Project Manager Shawn Ghose using a variety of terms. I believe this has lead to some confusion, as the offsite treatment system at the mouth of New Cricket Spring is sometimes referred to with overlapping terminology.

For clarity, when I speak of the "injection system" I am referring to the onsite part of the groundwater remediation, which Mr. Ghose describes in his August 2, 2010 update as quoted below:

> *"Responsible Party (R.P), McKesson started a pilot study, injecting Ozonated water near the sinkhole to speed up reduction of PCP in the formation upstream from the New Cricket Spring. The pilot project started by the summer of 2005. This process will ensure that the PCP will be destroyed in the subsurface fractures near the New Cricket Spring and the site can be deleted from the National Priorities List (NPL). The injection of ozonated water continues as of February 2007. Injection was stopped by August 2007 and resumed in September 2007. Immediately after resumption of injection of ozonated water*

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PCP at the mouth of New Cricket Spring was 200+ ppb. To expedite cleaning up residual PCP in fractures McKesson started 5 additional injection wells around the sinkhole in mid September 2007. McKesson will wait and see if the PCP concentration will diminish at the New Cricket Spring."

Following are some of the key issues I will be researching in the EPA and ADEQ pubic files. I request that you and your EPA colleagues assist with my research by providing any answers that may be readily available to you.

1. Were designs, construction plans and scientific proof-of-concept submitted to EPA prior to McKesson's installation of the "injection system?"
2. Did EPA approve the "injection system" prior to its installation on the Arkwood property by McKesson Corporation?
3. What scientific data and analysis were used to arrive at the design and specifications of the "injection system?"
4. What proof exists to support Mr. Ghose's assertion quoted above: "This process will ensure that the PCP will be destroyed in the subsurface fractures near the New Cricket Spring and the site can be deleted from the National Priorities List (NPL)."
5. Mr. Ghose is quoted above: "The injection of ozonated water continues as of February 2007. Injection was stopped by August 2007 and resumed in September 2007." When exactly was the injection stopped and restarted?
6. Mr. Ghose is quoted above: "Immediately after resumption of injection of ozonated water PCP at the mouth of New Cricket Spring was 200+ ppb." Is this one data point considered to be proof of the efficacy of the injection system?
7. Why does Mr. Ghose not mention the following readings, which were also taken right after resumption of the injection operations (all with the spring at the exact same flow rate of 18 gallons per minute) and which show no correlation between injection operations and low readings: 9/24/2007: 16 ppb; 10/10/2007: 6 ppb; 10/22/2007: 1190 ppb; 11/5/2007: 209 ppb?
8. Mr. Ghose is quoted above: "To expedite cleaning up residual PCP in fractures McKesson started 5 additional injection wells around the sinkhole in mid September 2007." Were designs, construction plans and scientific proof-of-concept submitted to EPA prior to McKesson's installation of 5 additional injection wells?
9. Was the additional invasive construction of five injection wells on the Arkwood site approved in advance by EPA, or was it undertaken by McKesson Corporation without agency approval, permission or consent?
10. Soon after "McKesson started 5 additional injection wells around the sinkhole in mid September 2007" the concentrations of PCP at New Cricket Spring spiked to an all-time high of 1190 ppb (October 2007). Is this evidence that McKesson Corporation's construction of the 5 additional wells caused a release of contaminant, inflicting possible ecological and property damage, exacerbating the contamination problem and hampering the groundwater remediation efforts?

I have many more questions about the design, construction, operation and reporting of the groundwater remediation systems on the Arkwood site and nearby at New Cricket Spring; about any unilateral actions taken by McKesson Corporation without required and appropriate EPA involvement; and about EPA oversight and scrutiny (or lack thereof) given to McKesson Corporation's activities at Arkwood with regard to the groundwater remediation.

I request that EPA review these matters to check for scientific validity and correct procedure in the implementation and justification of the existing groundwater remedy at the Arkwood, Inc. Superfund site.

Sincerely,

Charles Curtis Grisham, Jr.