Comments on TI Report

Kenneth Lovelace to: Diana Engeman 03/02/2006 04:12 PM

Cc Glenn Curtis, DavidE Cooper

History. This message has been forwarded.

Diana:

I reviewed the Technical Impracticability Evaluation Report for Former People's Natural Gas Site in Dubuque, Iowa, which you sent to me via email on 1/11/06. I apologize for the delay in getting comments back to you.

In general, I thought that the TI Evaluation report was clear and well organized. The TI evaluation components, discussed in Section 4.3 of the 1993 TI guidance, were adequately addressed in this report. In my opinion, the report presents sufficient justification for EPA to determine that it is not technically practicable to attain ARARs within the requested TI zone in the foreseeable future.

I particularly liked Sections 6, 7, 8 and 9. These sections provided information necessary for the TI rationale in a concise and logical format. The report makes it very clear that a significant mass of contaminant sources remain in the subsurface, including DNAPLs, and cannot be removed because they are present below existing buildings or other facilities. In my opinion this is the primary basis for the TI decision.

I have very few comments, which are listed below. None are significant.

1. "Potential Remedial Strategies" for further site cleanup are discussed In Section 6. An "Estimated Time Frame" to attain ARARs is given for each technology. This is very helpful, but it is not clear what the basis is for these rough time frame estimates, or why some are hundreds of years and others are thousands of years. I think some of these estimates may be based on discussion of time frames in earlier portions of the report It would be helpful to have a bit more explanation concerning the basis for the estimate.

2. Also, Section 6 includes a discussion of "Key Performance Limitations" of each technology. One of the bullets gives the approximate percent of contaminant mass that is inaccessible to remediation. Again, this is very helpful information. However, the same 35 percent figure is given for the first two technologies, excavation and in-situ solidification. Since in-situ solidification can be extended several feet under building foundations (and other structures), it seems that the percent of inaccessible mass would be somewhat less for in-situ solidification than for excavation. Also, it is not clear where these estimates come from. (Were they in Appendix K? I did not have this.) It would be helpful to cite the source for these estimates.

3. Section 7.3 states that MNA will be relied upon to maintain stability of the dissolved plume, and also mentions that a contingency may be "deemed necessary" if monitoring indicates that the plume is not stable It might be helpful to give one or more examples of what contingency actions could be taken. MNA processes are discussed earlier, in Section 6 4. Also, it is not clear whether the dissolved plume is currently stable. Section 5 5 1 discussion migration of dissolved contaminants, and includes the statement "Contaminant migration is expected to continue toward the east-southeast and (occasionally southwest). ." If the plume is not stable under present conditions (including MNA processes), why would we expect it to become stable in the future?

4. Section 8.3 explains the basis for the proposed extent of the TI zone. Does this also include all areas where DNAPL was observed in the subsurface, or otherwise suspected based on CPT, or TarGOST data? I think it does, but it would be helpful to state this in Section 8.3.

end