The Technical Outreach Services to Communities (TOSC) program is providing technical assistance to Chemical Commodities, Inc. (CCI) Concerned Citizens Group in Olathe, Kansas, on environmental issues related to the CCI site. The goal of TOSC assistance is to empower the community and other stakeholders with an independent understanding of underlying technical issues, so that they may participate substantively in the decision-making process. One form of support is to review technical reports related to the site.

TOSC program representatives performed a review of the above-referenced document, dated December 8, 2003, based upon a request by the CCI Concerned Citizens Group. The document presents the draft work plan for the in-place closure of the interceptor trench located at the CCI site by injecting a grout slurry mixture.

Review Comments

1. The document mentions approximately 500 feet of trench to be closed in place (page 4). According to the as-built plans from March 1991, total trench length is 375 feet. Length of risers and length of the discharge line add to 174 feet, thus bringing the total to 549 feet. If the risers and the discharge line will be filled and closed as well (and they should) it should be mentioned in the text of the document. If this is not the intent, then an explanation is needed as to why the discharge line and risers will not be plugged and how the approximately 500 feet of trench to be closed in place were calculated.

2. It appears that four injection points will be used to fill the trench: the pump station and three risers at the end of the trench segments. Distances between injection points are 75 feet, 125 feet and 175 feet. Distances of 120 and 175 feet between injection points seem to be excessive to ensure complete closure of the trench. Additional injection points maybe needed between the pump station and the
endpoint of trench segment C and the pump station and the northern endpoint of trench segment A.

3. Will the pump sled be inserted into the perforated pipe to fill the trench from the bottom? If so, it appears that the pump sled will have to go around 90 degree angled curves to move into the perforated pipe. Is this technically feasible? Also, the depth of the trench appears to be 17 feet or more. Will it be possible to fill the trench completely from the bottom through the perforated line (if this is indeed the planned approach) or through the bottom of the riser pipes? More information on the technical aspects of filling the trench should be included in the document.

4. Who will be responsible for removal of the pump and associated lines from the pump station? It is not advisable to inject the slurry grout at the pump station while the equipment is still in place.

5. Who will verify that all the water from the trench is evacuated prior to starting closure procedures? How will this be done? This should be addressed in the document.

6. On page 4 of the document it is mentioned that batch samples of the fill material will be sent to an independent laboratory for testing. What laboratory will be performing the tests and will this lab be certified by KDHE? What tests will be performed? This information should be included.

7. How will it be ensured that the trench is completely filled and will not act as a pool for contaminated ground water in the future? Are there any QA/QC procedures in place? This information should be provided in the document.

The above review comments were prepared by Sabine Martin (hydrogeologist) at the Midwest Hazardous Substance Research Center at Kansas State University. The above is provided at the request of and for use by the CCI Concerned Citizens Group. The Midwest Hazardous Substance Research Center receives funding via an EPA grant to provide non-biased technical assistance to stakeholders, free of charge, at Superfund, brownfields, and other types of environmental sites. Information presented herein is a summary of existing information in documents prepared by others. It does not represent the view of Kansas State University or the EPA. No preferences or warranties, express or implied, are intended or made.

If you have any questions regarding the above review comments or need additional information, please contact Terrie Boguski, 913-780-3328 or tboguski@sbcglobal.net, or Sabine Martin, 785-532-6519 or smartin1@ksu.edu.