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Subject: TI Site 30 draft RI - EPA comments

Remedial Investigation Report Installation Restoration Site 30, Day Care Center, May 2005

Thank you for the additional time to review and discuss this document. These comments are intended to cover issues not already delineated in the comments from the State and TIDA.

If the agenda allows, please add this topic for discussion and questions at the BCT meeting on Tuesday. It may be easier to clarify these points by drawing pictures and discussing. Otherwise, please let me know if there are further questions.

The evaluation of risk for the areas of the higher concentrations (T094: 50-1, 29-2, 29-1, 53-1, 48-1, 48-2) and the uncertainty of the concentration levels under the slab of the building is not complete in the draft document. The principles and issues described below may be pertinent to other areas of the parcel, but the comments focus on the area under the concrete pad and building slab.

1. While the concrete pad and slab of the building may serve as a present barrier to exposure, they do not constitute a remedy under CERCLA. They should be referred to, in terms of the physical description: concrete pad and building slab. The term 'cap' implies a remedy, which they are not.
2. The CERCLA process deals with releases, not conditions. The nature of exposure and the evaluation of risk are based on the release. The current conditions may affect the amount of current exposure, but do not change the need to evaluate the risk posed by exposure to the material. After the characterization of risk, and if and when the concrete pad and building slab are evaluated and accepted as a remedy that is protective against that risk, do the elements of the current conditions become a remedy. Prior to that occurring, the concrete pad and building slab are temporary measures that provide a temporary barrier, while the evaluation is done.
3. Once the risk of exposure to that material, for receptors under the current land use designations, is determined and is out of the acceptable risk range, it moves to the FS as part of the RAOs. The FS would include at a minimum the no action alternative, which shows the maximum risk (based on the risk assessment), the full mitigation alternative, which might be full demolition and excavation to show the maximum reduction of risk, and one or more alternative that fall in between, such as a barrier. If the barrier alternative is chosen, after considering public comment, then the engineering of the barrier and the long term monitoring and maintenance of the barrier is part of the Record of Decision. The fact that the concrete pad and building slab may, in the end of the process, be acceptable as a barrier, when accompanied by appropriate monitoring and maintenance, can not be used or confused to side-step the process of determining the risk of exposure to the material.

4. Given the high levels at the sample locations under the concrete pad

and the uncertainty of the amount and concentrations of material under the building slab, it is important to develop the exposure area units and the associated exposure point concentrations with the following in mind:

(a) The exposure area unit could be as small of the area of the concrete pad itself, should it be breached or removed. A child could play or a backyard of a townhouse could be situated directly over the area of highest concentration.

(b) Since the exposure unit could be small, it is important to use an exposure point concentration that is not diluted by adding in other samples from other areas of the parcel. Thus, the area of these high concentrations and the building slab should be evaluated as a unit, like a hot-spot, for the appropriately conservative risk evaluation.

5. The presentation of the final results of the RI risk assessment are most easily read and understood when there is a table that states first, the land use designation. Then the table lists the receptor, media, exposure pathway and risk determination. There can be two sections, one for current conditions and one for changed conditions, which need to be described. Once the RI risk assessment goes final, the same table moves to the FS and ROD. This provides for a clear understanding by all readers of the process and risk issues to be dealt with. The tables on 9-6 and 9-7 could serve as the input to the final table. The final table accompanies the conclusions for review, in the draft document, and the approved conclusions in the final document.