

40-6563



November 20, 2012

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Two White Flint North Building  
11545 Rockville Pike  
Washington, DC 20555  
Attn: Mr. John Buckley

**RE: Mallinckrodt C-T D&D License Number STB-401  
October 23, 2012 Meeting**

Dear Mr. Buckley:

Please find attached a copy of the Evaluation of Non-Licensed Contamination Technical Basis Document for Mallinckrodt C-T Plant we discussed during the October 23, 2012 meeting at the NRC offices in Rockville, MD.

As described at the meeting, the Technical Basis Document will be a component of a two part evaluation of the documentation in the Final Status Survey Report for each survey unit. First, residual licensed contamination will be demonstrated to be in compliance with the Phase II DP derived concentration guideline levels (DCGLs). Second, for residual non-licensed contamination that may remain deeper than six feet below the surface, a dose assessment will be provided for each survey unit. The dose assessment will utilize the RESRAD DCGL dose models modified to include a six foot cover. The TEDE (total effective dose equivalent) results from both the residual licensed contamination and non-licensed contamination will be summed and demonstrated to meet compliance with 25 mRem/yr.

Please contact me at 314-654-5838 if you require additional information.

Sincerely,

A handwritten signature in cursive script that reads "Karen Burke".

Karen Burke  
Director, Environmental Remediation

Enc: Evaluation of Non-Licensed Contamination Technical Basis Document for Mallinckrodt C-T Plant

Cc: John Buckley (NRC)  
Patricia Duft (Mallinckrodt)

*TSMEZD*