



1790 Bldg.  
September 6, 2006

The Dow Chemical Company  
Midland, Michigan 48674

Mr. David Nelson  
U.S. Nuclear Regulatory Commission  
11545 Rockville Pike  
Rockville, MD 20852

**SUBJECT:** Response to Remaining Two Open Comments from NRC Letter Dated January 12, 2004, *Evaluation of Revision 1 of Final Status Survey Reports for Areas VA-1 through VA-VI, Dow Chemical Company's Bay City Site*

Dear Mr. Nelson:

In a letter dated January 17, 2005, The Dow Chemical Company (TDCC) submitted responses to NRC comments on Revision 1 of Verification Area Reports VA-I through VA-VI (NRC letter dated January 12, 2004). Based on discussions with Duane Schmidt, it is our understanding that two comments from the January 12, 2004 letter remain to be resolved. The two NRC comments and TDCC's responses are provided below.

**1. Part of New General Comment 7 which states:**

*In addition, because not all of the Bay City facility has been remediated, there is the possibility that previously remediated areas may be cross-contaminated during further cleanup work. Before release of the site for unrestricted use, TDCC must demonstrate that previously verified areas have not been cross-contaminated*

**TDCC Response:**

During excavation activities air samples were collected upwind and downwind of excavated area. No significant airborne activity was identified. In addition, the excavated material was generally moist leading to minimal dust generation during excavation. Traffic patterns in and out of the work areas were controlled to ensure no contaminated vehicles traversed the areas covered by VA-1 through VA-VI. Based on the above, TDCC is confident that previously remediated areas were not cross-contaminated.

**2. New Comment 10 which states:**

*As discussed in TDCC's response to general comment 1B, TDCC removed quadrant I4-9-C from the VA-VI database. In TDCC's grid system, a quadrant is one-quarter of a 100 m<sup>2</sup> area. Compliance with the radiological criteria is primarily based on 100 m<sup>2</sup> areas (subgrids in TDCC's system). Thus, NRC staff concludes that after additional*

*remediation of quadrant I4-9-C, TDCC will need to demonstrate compliance for the entire subgrid I4-9, not just the quadrant.*

**TDCC Response:**

Subgrid I4-9 was remediated soon after the VA-VI survey was completed. The subgrid was re-sampled in January 2006. The results are as follows:

- Quadrant I4-9A 0.72 pCi/g Th-232
- Quadrant I4-9B 1.31 pCi/g Th-232
- Quadrant I4-9C 0.37 pCi/g Th-232
- Quadrant I4-9D 2.81 pCi/g Th-232

All results are below the unrestricted use criteria of 3.2 pCi/g Th-232. The average is 1.30 pCi/g.

This letter serves to complete the TDCC response to the NRC comments provided in the January 12, 2004 letter. To our knowledge, all NRC issues and questions pertaining to reports VA-I through VA-VI are resolved.

Please contact David Wojkowiak (401-323-8769) or me if you have any questions.

Sincerely,



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