UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 W. JACKSON BOULEVARD CHICAGO, ILLINOIS 60604-3590

Reply to the Attention Of: SR-6J

June 27, 2013

Mr. Todd Konechne The Dow Chemical Company 1111Washington Street Midland, Michigan 48640

RE: Tittabawassee River Segment 2 Response Proposal, ARARs
Tittabawassee River, Saginaw River & Saginaw Bay Superfund Site
EPA Document #EPA2013.012

Dear Mr. Konechne:

As you know, there has been a fair amount of correspondence involving Applicable or Relevant and Appropriate Requirements (ARARs) and Segment 2 of the Tittabawassee River, Saginaw River & Saginaw Bay Superfund Site:

- 4/23/12: EPA requested that MDEQ identify potential ARARs for Segment 2
- 6/15/12: Trustees identified ARARs potential ARARs for all eight segments of Operable Unit 1 for the Site
- 7/24/12: EPA issues Approval Memorandum for Proposed Non-Time Critical Removal Action (NTCRA) for Segment 2
- 7/31/12: MDEQ identifies potential ARARs for Segment 2
- 10/9/12: Dow submits draft Segment 2 Response Proposal to EPA
- 11/20/12: Saginaw Chippewa Indian Tribe identifies concerns for culturally significant site within the Site (including reference to four statutes and an Executive Order)
- 12/19/12: MDEQ comments on the Dow Segment 2 Response Proposal, including comments on ARARs section
- 12/19/12: Trustees comment on the Dow Segment 2 Response Proposal, including comments on ARARs section
- 1/18/13: EPA provides Dow with comments on the Dow Segment 2 Response Proposal, including comments on ARARs section, excluding the ARARs section
- 2/4/13: EPA provides Dow with comments on the ARARs section of the Dow Segment 2 Response Proposal
- 3/29/13: Dow submits revised Dow Segment 2 Response Proposal
- 4/2/13: Dow responds identifying certain of EPA's 2/4/13 comments on the ARARs section of the Dow Segment 2 Response Proposal which it is declining to incorporate.

This letter serves to respond to Dow's April 2, 2013 letter. In its April 2013 letter, Dow identifies several concerns related to EPA's February 2013 comments:

- Some ARARs identified by EPA will only be ARARs "if extraordinary circumstances arise during response activities";
- Some of the ARARs identified by EPA "do not appear to be 'environmental' or 'siting' laws [as required by CERCLA and its implementing regulations]."
- Some of the ARARs identified by EPA deal with internal government matters, are not laws of general applicability, and are process-focused.

Dow made changes to the language describing several ARARs, declined to include other ARARs, and edited current footnote 18 (former footnote 17) in the Segment 2 Response Proposal. EPA responds as follows.

First, because EPA issued an Approval Memorandum for Proposed NTCRA for Segment 2, the Segment 2 Response Proposal is following the NTCRA process, including submittal of an Engineering Evaluation/Cost Analysis (EE/CA) to EPA for approval. See January 2010 AOC at Appendix A, Sections VI.8.4.4 and VIII.G. When on the NTCRA path, the EE/CA stage involves the identification of potential ARARs. See EPA's "Guidance on Conduction Non-Time-Critical Removal Actions Under CERCLA" (August 1993), at Section 2.6 and Exhibit 8. However, potential ARARs for a given response action are not "frozen" until the decision document phase, which for a NTCRA is in the Action Memorandum. EPA recognizes that some ARARs which appear in the EE/CA may not appear in the Action Memorandum, but EPA does believe that all of the ARARs listed in its February 2013 letter (with the exception of 2 discussed below) should be identified at the EE/CA stage. EPA is working with Dow, the State, and the Trustees to understand which of the potential ARARs identified in the EE/CA should also appear in the Action Memorandum. EPA encourages Dow to submit any additional information it may have regarding whether or not particular circumstances associated with the ARARs exist at Segment 2.

Second, EPA acknowledges that some of the ARARs identified by EPA "do not appear to be 'environmental' or 'siting' laws [as required by CERCLA and its implementing regulations]." 42 U.S.C. § 121; 40 C.F.R. 400.5. However, EPA has long identified resource protection statutes as ARARs, including the National Historic Preservation Act, the Archeological and Historic Preservation Act, the Endangered Species Act, the Wild and Scenic Rivers Act, the Fish and Wildlife Coordination Act, the Coastal Zone Management Act, and the Wilderness Act. See EPA Guidance "CERCLA Compliance with Other Laws Manual Part II" (August 1989), at Section 4. See also EPA's "RCRA, Superfund & EPCRA Hotline Training Manual: Introduction to Applicable or Relevant and Appropriate Requirements" (June 1998, updated February 1998), at 18. Laws related to tribal matters have been identified as ARARs at numerous sites including the Blue Ledge Mine Site (Rogue River - Siskiyou National Forest, CA), the East Helena Superfund Site (East Helena, MT), and the Highland Mine Site (Siler Bow County, MT). Furthermore, cultural resource ARARs are routinely identified at Superfund Sites involving the military. See Department of the Navy "Environmental Restoration Program Manual (August 2006) at Section 1.7

Third, EPA acknowledges that portions of the ARARs identified by EPA deal with internal government matters and are process focused, but EPA maintains that at least a portion of each ARAR and TBC are, in the case of the ARARs either directly applicable or, if not applicable,

relevant and appropriate. In the case of TBCs, at least a portion of each TBC may be useful in developing a CERCLA response action.

Turning to the specific changes made by Dow, Dow did not dispute that some ARARs belonged on the list of potential ARARs, but Dow altered the language describing them:

- Michigan Water Quality Standards: EPA agrees that the word "surface" can be inserted in the first sentence and that the reference to parathion can be deleted. EPA does, however, direct to retain the language "when there is turbidity during river bottom work" since under Michigan Administrative Rule 323.1092, the state may determine that such activities result in unacceptable adverse impacts on designated uses.
- RCRA LDRs: EPA agrees with this change.
- Michigan Natural Resources and Environmental Protection Act Part 31: EPA agrees with this change.

Dow also declined to include other ARARs:

- **Great Lakes Water Quality Initiative**: EPA disagrees with Dow. The GLWQI may be a TBC¹ since it specifically addresses response actions involving discharges which may lower water quality in the Great Lakes (see the Antidegradation Standard in 40 C.F.R. Part 132, Appendix E). EPA directs Dow to retain this as a potential TBC.²
- Archeological and Historic Preservation Act: EPA disagrees with Dow. To the extent that historic and archeological data might be lost as a result of alterations of the terrain caused as a result of response action, the AHPA is relevant and appropriate. See EPA Guidance "CERCLA Compliance with Other Laws Manual Part II" (August 1989), at Section 4.2. EPA directs Dow to retain this as a potential ARAR.
- American Indian Religious Freedom Act: EPA disagrees with Dow. To the extent the Segment 2 response action may limit access to a location in order to believe, express and exercise traditional religions, the AIRFA is relevant and appropriate. This is of particular concern in for Segment 2 since the Saginaw Chippewa Indian Tribe identified concerns for culturally significant sites within the Site. EPA directs Dow to retain this as a potential ARAR.
- Archeological Resources Protection Act: EPA disagrees with Dow. To the extent archeological resources and/or sites are determined to be present at Segment 2, the APRA is relevant and appropriate. EPA directs Dow to retain this as a potential ARAR.
- Native American Graves Protection and Repatriation Act: EPA disagrees with Dow. to the extent Native American cultural items, including human remains, funerary objects and sacred objects excavated or discovered at Segment 2, the NAGPRA is relevant and appropriate. EPA directs Dow to retain this as a potential ARAR.³
- Fish and Wildlife Conservation Act: EPA agrees with the removal of the Fish and Wildlife Conservation Act.

¹ TBCs are advisories, criteria, or guidance developed by EPA other federal agencies, or states to be considered for a particular release because they may be useful in developing a CERCLA response action.

² Note there was a typo in the language EPA provided in February 2013. The description of the GLWQI should have read "...any remedial action involving discharges should, in general..."

³ Note there was a typo in the language EPA provided in February 2013. The description of the NAGPRA should have read "...or discovered at Segment 2, the NAGPRA is relevant and appropriate."

- Fish and Wildlife Coordination Act: EPA disagrees with Dow. The Fish and Wildlife Coordination Act may be relevant and appropriate to the extent that response activities to be undertaken in Segment 2 control or structurally modify a natural stream or body of water. See EPA Guidance "CERCLA Compliance with Other Laws Manual Part II" (August 1989), at Section 4.5. EPA directs Dow to retain this as a potential ARAR.
- Executive Order 12962: EPA agrees with the removal of Executive Order 12962.

Finally, Dow edited footnote 18 (previous footnote 17) in the Segment 2 Response Proposal. Because this will be a performance-based removal, EPA does not believe it is necessary at this point to discuss the proper characterization of the recent amendments to Michigan's Part 201 in great detail. EPA does, however believe that the following changes to footnote 18 (previous footnote 17) are appropriate:

It should be noted that any standard, requirement, criterion, or limitation under any federal environmental law, or any promulgated standard, requirement, criterion, or limitation under a state environmental law, which contains a cleanup criterion/number for sediment or soil is not considered a chemical-specific ARAR for this response action since this response action is non-numeric performance-based and is not driven by a cleanup criterion/number criteria/numbers. Michigan law (Part 201, Environmental Remediation of NREPA) expressly recognizes the use of non-numeric site-specific criteria for response activities (MCL 324.20120b) As appropriate, cleanup criteria criteria por possible evaluated as potential chemical-specific ARARs for any future risk-based responses, including potentially the Tittabawassee River Floodplain Soil Response Proposal.

Please contact me at (312) 886-4699 if you have any questions.

Sincerely,

Mary P. Logan

Remedial Project Manager

May P. Los

cc via email: A. Taylor – MDEQ

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