



April 2, 2013

The Dow Chemical Company  
Midland, MI 48674

Ms. Mary Logan  
Remediation Project Manager  
U.S. Environmental Protection Agency, Region 5  
77 West Jackson  
Chicago, IL 60604

**Re: The Dow Chemical Company, Segment 2 Response to Agency Comments  
Section 4.3 Applicable or Relevant and Appropriate Requirements.  
Settlement Agreement No. V-W-10-C-942  
The Tittabawassee River/Saginaw River & Bay Site  
Dow Submittal Number: 2013.018**

Ms. Logan:

By letter dated February 4, 2013, U.S. EPA transmitted comments related to Section 4.3 of the Segment 2 RP, Applicable or Relevant and Appropriate Requirements (ARARs). The revised Segment 2 RP incorporates all of the changes set forth in U.S. EPA's comments, except as set forth below.

Some of the ARARs that EPA included in its comments would only be relevant or appropriate if extraordinary circumstances arise during response activities, such as the discovery of an archeological site. While these laws could become applicable or relevant if such circumstances arise, listing these laws detracts from the central goal of ARARs, which is to focus planning efforts to ensure a "degree of cleanup" that is protective of "human health and the environment." 42 U.S.C. 9621(d). Some of the listed laws also do not appear to be "environmental" or "siting" laws, as required by the CERCLA definitions of "applicable" and "appropriate and relevant." 40 C.F.R. 400.5. Finally, a few of the laws/orders listed in EPA's comments deal with internal government policy, funding, and agency/state cooperation, and are not laws or promulgated rules of general applicability. These laws and directives tend to be more process/administratively focused, and provide little or no useful criteria or guidance to assist the response work. Trying to adapt and interpret these government-focused laws and orders to inform the cleanup is confusing, even as "to be considered" (TBCs) materials. TBCs are meant to consist of guidance, advisories and similar documents that may be "useful" in developing the remedy, for example, guidance that helps explain how ARARs should be implemented. 40 C.F.R. 300.400(g)(3). TBCs should not add new requirements or overly complicate the compliance analysis.

Per EPA's comments, Dow has added the following ARARs and TBCs to Section 4.3: Bald and Golden Eagle Protection Act; NREPA Part 31; NREPA Part 91; NREPA Part 111; NREPA Part 115; NREPA Part 121; NREPA Part 365; NREPA Part 413; and Mich. Admin. Code Rule 901. The ARARs were also reorganized pursuant to EPA's comments. Only a few minor changes were made to these EPA edits:

- **Michigan Water Quality Standards:** Michigan Administrative Rule 323.1092 exempts in-water dredging activities from surface water quality standards when authorized or permitted by the U.S. Army Corps of Engineers or the Michigan DNR. The permit requirement is supplanted by EPA CERCLA authority (40 C.F.R. 300.400(e)), exempting in-water dredging activities in this case pursuant to the Rule. Note, however, that surface water quality standards do apply to dewatering, treatment, and similar activities that may be associated with the dredging operations, and so this language was retained.
- **Subtitle C of RCRA / Part 111.** A minor clarification was added to note that LDR requirements are ARARs only for wastes generated as part of the removal response action.
- **Part 31.** A clarification was added to note that regulated "point sources" are likely to be associated with "dewatering or treatment areas." Not all dredging activities amount to "point sources."

Consistent with the above reasoning, and as explained further below, the following EPA comments were not incorporated as ARARs or TBCs in the revised Segment 2 RP:

- **Great Lakes Water Quality Initiative.** EPA's comments added Appendix E (Antidegradation Policy) of the Great Lakes Water Quality Initiative as a TBC. However, as EPA's comment points out, the Appendix expressly exempts CERCLA response actions from coverage, and, therefore, listing it as a TBC is counter to the intent of the Initiative. Further, most of the Initiative's requirements apply to States and Tribes, requiring them to adopt legal provisions to implement the requirements of the Initiative, and, therefore, this requirement is already met by meeting federal and Michigan water quality laws.
- **Archeological and Historic Preservation Act.** The Segment 2 RP does not involve the building of dams or licensed/federally funded alterations to terrain, nor has there been any indication that there are significant scientific, pre-historical, historical or archeological "data" that could be lost due to the planned response activities, and, such data is extremely unlikely to be present in work areas. Therefore, we do not agree that this law should be listed as an ARAR in this case.
- **American Indian Religious Freedom Act.** This Act is a general statement of federal policy and a directive for federal departments and agencies to assess whether additional legislative action is needed. It is not a law of general applicability, nor does it provide substantive environmental or siting standards. Given the scope of the planned work under the Segment 2 RP, it is extremely unlikely that American Indian religious rights will be implicated in any way. Therefore, we have not listed the law as an ARAR.
- **Archeological Resources Protection Act.** By its express terms, this Act applies to archeological resources located on federal and Indian land. Segment 2 does not include any federal or Indian land, therefore, the Act is not applicable. Much of the Act provides

for an administrative permitting process for archeological excavation, which is not relevant here, nor does the Act provide clear substantive standards. Overall, it is exceedingly unlikely that such resources will be encountered as part of the planned response activities; therefore, the Act has not been included in the list of ARARs.

- **Native American Graves Protection and Repatriation Act.** This Act applies to and addresses grave sites located on federal and Indian land. Segment 2 does not include any federal or Indian land, and, therefore, the Act is not applicable. It is very unlikely that a burial site will be encountered as part of the planned response activities, therefore, the Act has not been included as an ARAR.
- **Fish and Wildlife Conservation Act.** This law directs internal government policy, funding, and the coordination of state conservation plans. It is not intended as a guide for remediation. Although the law has as its general purpose conservation, the law does not include any specific criteria to help inform Dow's response activities.
- **Fish and Wildlife Coordination Act.** In order to generally promote fish and wildlife resources, this law provides for consultation, reporting, and funding between, and land acquisition by, federal agencies, and is applicable to federal projects or federally licensed projects. These internal governmental requirements do not apply to, and are not relevant to, Dow's activities. The law does not provide specific substantive criteria to guide the Segment 2 work. The Act also appears to contemplate large scale projects typically undertaken by agencies of the government, such as dams and hydro-electric facilities, which are fundamentally different than the remedial work contemplated here. See 16 U.S.C. 662(h) (exempting impoundments less than 10 acres).
- **Executive Order 12962.** This document is also an internal governmental directive, and, therefore, it is unclear how its broad mandates would be useful as guidance for the planned response activities, or how the governmental requirements should be translated into guidance for private response action.

Finally, the edits that EPA made to footnote 17 have been made, together with a few additional edits as shown below. The additions take note of recent amendments to Michigan's Part 201 that provide flexibility to use non-numeric performance-based criteria:

[Footnote 17] 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. **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, sediment and/or soil cleanup criterion/numbers **along with non-numeric criteria** (e.g., **under Part 201, Environmental Remediation of the NREPA**) will be evaluated as potential chemical-specific ARARs for any future risk-based responses, including potentially the Tittabawassee River Floodplain Soil Response Proposal.

Mary Logan  
April 2, 2013  
Page 4

If you should have any questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Todd Konechne". The signature is written in a cursive style with a long, sweeping underline.

Todd Konechne  
The Dow Chemical Company  
Project Coordinator

CC: Al Taylor, MDEQ  
Diane Russell, U.S. EPA  
Joseph Haas, U.S. Fish and Wildlife  
Steve Lucas, Dow  
Peter Wright, Dow  
Mary Draves, Dow  
Kip Cosan, Dow