

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY COMMENTS:

**REMEDIAL INVESTIGATION SCOPE OF WORK FOR CORRECTIVE ACTION
BEYOND THE FACILITY BOUNDARY
MIDLAND AREA SOILS**

**REMEDIAL INVESTIGATION SCOPE OF WORK FOR CORRECTIVE ACTION
BEYOND THE FACILITY BOUNDARY
TITTABAWASSEE RIVER AND FLOODPLAIN**

THE DOW CHEMICAL COMPANY (DOW)
MIDLAND, MICHIGAN
MID 000 724 724

**REMEDIAL INVESTIGATION SCOPE OF WORK FOR CORRECTIVE ACTION
BEYOND THE FACILITY BOUNDARY
MIDLAND AREA SOILS**

TASK I: INTERIM RESPONSE ACTIONS

1. The SOWs should provide IRAs to reduce exposure to contaminants that are detailed enough to be directly implemented.
2. IRAs presented should be prioritized toward areas with the highest contamination and exposure potential. The criteria used to make this determination should be provided.

F. Human Health Risk Assessment

3. The recommendations detailed in the U.S. EPA document *Risk Assessment Guidance for Superfund: Volume III - Part A, Process for Conducting Probabilistic Risk Assessment* (U.S. EPA, 2001) should be considered. Accordingly, U.S. EPA recommends that Dow consider the following key guiding concepts:
 - Use a tiered approach to incorporating PRA into site risk assessments.
 - Submit a workplan for Agency review prior to initiating work on a PRA.
 - Perform a point estimate assessment prior to considering a PRA.
 - While a PRA can provide a useful tool to characterize and quantify variability and uncertainty in risk assessments, it is not appropriate for every site.
 - A PRA generally requires more time, resources, and expertise on the part of the assessor, reviewer, and risk manager than a point estimate risk assessment.
 - The decision to use PRA is site-specific and is based on the complexity of the problems at the site, the quality and extent of site-specific data, and the likely utility of the result.

- If the additional information provided from a PRA is unlikely to affect the risk management decisions, then it may not be prudent to proceed with a PRA. However, if there is a clear value added from performing a PRA, then the use of PRA as a risk assessment tool generally should be considered, despite the additional resources that may be needed.
- Communicating the results of a PRA will be more challenging than communicating the results of a point estimate risk assessment because PRA and its perspective will be new to most participants.
- If the decision is made to conduct a PRA, it is important to include the community in the planning process. Communication on the PRA may involve: providing the community with a basic understanding of the principles of PRA, discussing the proposed workplan and inviting comments on the proposed approach, discussing site-specific data, and communicating the final results and how they impact decisions for the site.

PROPOSED SCHEDULE OF TASKS

4. The Current Conditions Report and RI Workplan should be developed concurrently to expedite implementation of the RI.
5. The proposed schedule should be modified so that the RI can begin with the 2004 field season.

REMEDIAL INVESTIGATION SCOPE OF WORK FOR CORRECTIVE ACTION
BEYOND THE FACILITY BOUNDARY
TITABAWASSEE RIVER AND FLOODPLAIN

TASK I: INTERIM RESPONSE ACTIONS

6. The SOWs should provide IRAs to reduce exposure to contaminants that are detailed enough to be directly implemented.
7. IRAs presented should be prioritized toward areas with the highest contamination and exposure potential. The criteria used to make this determination should be provided.

A. Riverside Boulevard

8. IRAs to reduce exposure to contaminants should be proposed for the Riverside Boulevard residential area.

F. Human Health Risk Assessment

9. The recommendations detailed in the U.S. EPA document *Risk Assessment Guidance for Superfund: Volume III - Part A, Process for Conducting Probabilistic Risk Assessment* (U.S. EPA, 2001) should be considered. Accordingly, U.S. EPA recommends that Dow consider the following key guiding concepts:
 - Use a tiered approach to incorporating PRA into site risk assessments.
 - Submit a workplan for Agency review prior to initiating work on a PRA.
 - Perform a point estimate assessment prior to considering a PRA.
 - While a PRA can provide a useful tool to characterize and quantify variability and uncertainty in risk assessments, it is not appropriate for every site.
 - A PRA generally requires more time, resources, and expertise on the part of the assessor, reviewer, and risk manager than a point estimate risk assessment.
 - The decision to use PRA is site-specific and is based on the complexity of the problems at the site, the quality and extent of site-specific data, and the likely utility of the result.
 - If the additional information provided from a PRA is unlikely to affect the risk management decisions, then it may not be prudent to proceed with a PRA. However, if there is a clear value added from performing a PRA, then the use of PRA as a risk assessment tool generally should be considered, despite the additional resources that may be needed.
 - Communicating the results of a PRA will be more challenging than communicating the results of a point estimate risk assessment because PRA and its perspective will be new to most participants.
 - If the decision is made to conduct a PRA, it is important to include the community in the planning process. Communication on the PRA may involve: providing the community with a basic understanding of the principles of PRA, discussing the proposed

workplan and inviting comments on the proposed approach, discussing site-specific data, and communicating the final results and how they impact decisions for the site.

PROPOSED SCHEDULE OF TASKS

10. The Current Conditions Report and RI Workplan should be developed concurrently to expedite implementation of the RI.
11. The proposed schedule should be modified so that the RI can begin with the 2004 field season.