

COMMENTS
REMEDIATION WORK PLAN
Oliver Plow Works/Studebaker Area C (Soil)
VRP #6001202

GENERAL

Comments on this RWP are similar to those from the review of the Studebaker Area A Soil RWP (VRP #6020803). For example, it appears that this Area C RWP is essentially another work plan for an additional field investigation. Most of the key elements of an RWP (evaluation and recommendation of remedial alternatives, design of remediation system, monitoring/confirmation sampling plan, operation and maintenance plan, schedule, and cost estimate) have been reserved for the Amended RWP. While additional field investigations can be an element of an RWP, it is unclear why the Applicant elected to submit this document as an RWP.

As with the Area A Soil RWP, there are some inconsistencies throughout this Area C RWP on the sequence of future events/submittals. For example, most places in the document state that upon completion of the additional field investigation activities, an amended RWP will be prepared and submitted for IDEM approval. However, other statements in the document contradict this: Section 6.1 states that an Additional Investigation Work Plan will be submitted to IDEM within 90 days of the approval of the RWP, and Section 6.5 states that following completion of the investigative activities, the consultant will consolidate data into an investigative update report that will be submitted to IDEM. Consequently, clarification is necessary regarding future deliverables for this project.

SPECIFIC

Section 1.0, Executive Summary, pages 1-2:

1. The executive summary should be revised to include statements identifying the sources of contamination and the need for additional investigation.

Section 2.1.1, Site Location and History, pages 3-8:

2. **Page 3** The text states that to date, all but two of the buildings have been demolished. According to Figure 4, three buildings (14A, 46, and 47) remain on the site. Please clarify.
3. **Page 4** The text states that Weston's assessment noted three USTs in the southwest portion of the site. A review of their report in Appendix A indicates that five USTs were present at the site (four of which were located in the southwest portion of the site). Please clarify.
4. Page 2-7 of Weston's report states that the on-site sewer system received all industrial process wastes, and that there may be portions of the system that may contain residual levels of metals, oils and greases, and toxic organics. It is possible that leaks in the sewer system may have resulted in the migration of these contaminants to site soils; consequently, there could be additional areas of the site that would require investigation/sampling. It is assumed that the sewer system was removed during the demolition of the buildings; however, this RWP does not mention any previous investigation related to the on-site sewers. This issue should be addressed in the RWP.

5. **Page 5** The 1999 Phase II Site Assessment conducted by Envirocorp also included the installation of nine monitoring wells. This information should be included in the text, as well as their locations shown on Figure 2 (the first identification of these wells is on Figure 4). Figure 2 also should be revised to indicate where Envirocorp's trenching investigation occurred.
6. **Page 6** A review of the Former Foundry Soil Evaluation included in Appendix D indicates that only four soil samples were analyzed from the 17 borings advanced. Furthermore, stained soils were observed in several borings; however, only one soil sample from two of those borings (#5 and #13) was analyzed. In spite of the limited analytical data in this area, please provide the rationale for reducing the lateral extent of proposed sampling in Area 4.
7. The text states that Hull completed Interim Phase II ESA activities to characterize surface soils in eight Recognized Environmental Condition areas (RECs), and that the field activities included the installation of 29 soil borings. Since boring depths are not identified, it is unclear whether any subsurface soils were collected for laboratory analysis during this event. Characterization of the vertical extent of soil contamination includes the collection of samples at various depths within the vadose zone. If only surface soils were analyzed, some of these RECs will have to be revisited during this additional proposed sampling. Please revise the text to provide details regarding the Interim Phase II ESA sampling.
8. **Page 7** Based on the location of the former loading dock shown on Figure 4, please provide the rationale for the area 20 proposed sample locations (i.e., all of the Area 20 proposed sample locations are only to the south of the former loading dock instead of encircling the former dock).
9. **Pages 7 and 8** The text states that the petroleum-impacted soil area identified on Figure 2 was excavated and confirmation samples were collected for TPH analysis, and the "green" soil area identified on Figure 2 was excavated with no mention of confirmation sampling. According to section 2.2.1 of this RWP, both of these areas (22 and 23) have been set aside for only a groundwater assessment. Both of these areas need to be addressed during the additional proposed soil sampling. Soil Samples should be collected in Area 22 and analyzed for individual constituents of a TPH analysis, as well as lead, and soil confirmation samples should be collected in Area 23.

Section 2.2.1, Sources and Extent of Contamination in Soil, Pages 8-11:

10. **Area 9** Please explain how the extent of this area was defined without the benefit of previous sampling results (MW-6 appears to be the only data point in the vicinity, and it is not within Area 9).
11. **Area 14** Figure 3 must be revised to identify Area 14, and Figure 4 should be revised to identify the proposed sampling locations in Area 14.
12. **Areas 20 and 21** Based on encountering discolored soils in these areas during demolition activities, the potential COCs should include other constituents in addition to metals. Please revise the COCs for these two areas.
13. **Areas 22 and 23** Soils should be addressed in these two areas (see comment 9).

14. Based on the presence of stained soils at monitoring well location MW-4 (at depths up to 10.5 feet bgs), this area should also be included in the additional field investigation.
15. Weston's assessment shows two USTs to the east of building 46, and Figure 2 shows that previous sampling in this area is limited. This area should also be included in the additional field investigation.

Section 2.2.2, Ecological Assessment Results, page 11:

16. The text does not state whether the IDNR and USFWS were contacted to check on the potential for endangered/threatened species in the vicinity of the site. Please provide this information.
17. Based on Appendix C of the 1996 VRP Resource Guide, parks are included as one of the critical habitats to be considered in the determination of the appropriate cleanup criteria for the site. A park is identified to the north of the site on Figures 2, 3, and 4. Please address this critical habitat in the RWP.

Section 2.2.3, Baseline Hydrogeological Assessment Results, pages 11-12:

18. The text states, "...the relatively permeable nature and lateral continuity of the unconsolidated deposits would tend to promote relatively rapid and extensive migration of contaminants in unsaturated soils." This statement suggests that extensive vertical profiling of the unsaturated zone is necessary at this site. However, there appears to have been limited vertical profile sampling during previous investigations, and limited vertical profiling is proposed in Section 6.1. Because COCs include more than just lead, additional subsurface soil sampling should be conducted during this additional investigation.
19. This baseline hydrogeologic assessment should also include a discussion of the following: a more detailed site stratigraphy (fill composition, thickness, and lateral extent, thickness of the clay unit separating the two aquifers, depth to bedrock, etc.); physical results (grain size, TOC, etc.); vertical gradients within the shallow aquifer; and site topography and surface drainage pathways.

Section 3.0, Cleanup Criteria Selection, page 13:

20. IDEM's January 1996 VRP Lead Policy does not specifically indicate the amount of soil cover required for the "no exposed soil" condition. Please provide supporting information.

Section 4.1, Objectives of Remedial Action, page 14:

21. This section lists the objectives of this work plan, please revise this section to provide the remediation objectives for all affected media, COCs, and exposure pathways.

Section 4.2, Summary, page 14:

22. Since many of the elements of an RWP (e.g., proposed remedy, project schedule, confirmatory sampling and analysis plan, etc.) will not be provided until submittal of the Amended RWP, this current document is essentially a second Additional Phase II ESA Work Plan. Please clarify why it was submitted to the agency as an RWP.

Section 5.0, Risk Assessment, page 16:

23. It should be noted in this section that some of the compounds (e.g., phenanthrene, benzo[g,h,i]perylene, etc.) will require a calculated Tier II nonresidential cleanup goal.

Section 6.1, Additional Field Investigation, page 17:

24. Figure 4 of the RWP only shows the areas that are being proposed for additional investigation and, if necessary, remediation under this RWP. In order to evaluate the proposed additional sampling, this RWP, at a minimum, should include the Phase II ESA figures that clearly define the vertical and horizontal extent of contamination known to date.
25. Direct-push sampling is proposed to depths of 10 to 20 bgs. According to the hydrogeologic assessment results, the water table is present at approximately 20 feet bgs; consequently, each boring should extend through the entire vadose zone.
26. Figure 4 shows the locations of 70 direct-push sampling locations, but there are 81 surface soil and 81 subsurface soil samples proposed. Are these "extra" 11 sample QA/QC samples, or will some borings have more than one surface and one subsurface soil sample submitted for analysis? Please provide clarification and detail (e.g., sample depths, rationale, etc.) on the proposed sampling.
27. The text states that the additional field investigation also includes four continuously sampled soil borings. Please indicate the proposed completion depth(s) for these borings.
28. The text states, "An Additional Investigation Work Plan will be submitted to IDEM within 90 days of the approval of the RWP." This statement is inconsistent with others in the RWP that indicate that an Amended RWP will be prepared and submitted to IDEM for approval following the additional investigation activities. Clarification of the sequence of events/documents is required.

Section 6.5, Data Management, pages 19-20:

29. The text states; "Following completion of investigative activities, Hull will consolidate data into an investigative update report that will be submitted to IDEM..." This is inconsistent with previous statements in the RWP (see comment 27), and clarification of the sequence of events/submittals is required.

Section 8.0, Community Relations, page 22:

30. The text states that the Community Relations Plan (CRP) has been prepared in general conformance with the requirements described in the July 1996 VRP Resource Guide. Please include the CRP in this RWP, using the attached March 8, 2001, Nonrule Policy Document, and reference its location.

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IDEM Nonrule Policy Document

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Title: Voluntary Remediation Program Community Relations Plan**Identification Number:** WASTE-0049-NPD**Date Originally Adopted:** April 20, 2001**Dates Revised:** None**Other Policies Repealed or Amended:** Amends the Community Relations Section (8.0) of the Remediation Work Plan Requirements found in the Voluntary Remediation Program's Resource Guide (July 1996) and supplements the Voluntary Remediation Program Chapter (4) of the Risk-Integrated System of Closure User's Guide (February 2001)**Brief Description of the Subject Matter:** This document addresses community relations activities necessary for inclusion in and approval of a Voluntary Remediation Program Remediation Work Plan.**Citations Affected:** IC 13-25-5-7; IC 13-25-5-11

This nonrule policy document is intended solely as guidance and does not have the effect of law or represent formal Indiana Department of Environmental Management ("IDEM") decisions or final actions. This nonrule policy document shall be used in conjunction with applicable laws. It does not replace applicable laws, and if it conflicts with these laws, the laws shall control. A revision to this nonrule policy document may be put into effect by IDEM thirty (30) days after the revised nonrule policy document is made available for public inspection and comment and is presented to the Solid Waste Management Board. IDEM will submit revisions to the Indiana Register for publication.

Policy Statement

The Voluntary Remediation Program ("VRP") requires the submittal of a proposed Remediation Work Plan for IDEM approval. This plan must include a Community Relations Plan as stated in IC 13-25-5-7. The requirements of the Community Relations Plan were previously issued as part of the Voluntary Remediation Program Resource Guide (latest update - July 1996). As part of the ongoing evaluation of IDEM's remediation programs, especially with respect to IDEM's upcoming risk based remediation policy, and public information concerns, the VRP's Community Relations Plan requirements are being revised. This revision will replace the Community Relations Plan requirements last addressed in the July 1996 Resource Guide and will supplement the Voluntary Remediation Program Chapter of the Risk-Integrated System of Closure User's Guide (February 2001). The new basic components take a more proactive approach to making sure that neighboring residents, businesses and institutions are informed of VRP site remediation activities.

Community Relations Plan Requirements

Community education and participation is a necessary component of all VRP projects. Therefore, the Remediation Work Plan is required to contain a Community Relations Plan. The minimum requirements of a Community Relations Plan are stipulated below. These requirements apply to all VRP applications approved after the effective date of this policy. Participants are also encouraged to inform the community about their project by utilizing communication methods beyond the minimum requirements listed in this document. For example, many VRP participants find that informal informational meetings and discussions are effective in preventing project complications sometimes caused by having an uninformed public. Such meetings are especially appropriate for neighbors and sensitive community institutions. Other effective means of community relations communication can include, but are not limited to, canvassing the neighborhoods door-to-door, and mass mailings. Regardless of the communication methods used, participants should formulate a Community Relations Plan in conjunction with their IDEM Voluntary Remediation Project Manager that best addresses the needs of the participant and the community.

Listed below are the basic components that a Community Relations Plan must include. The Community Relations Plan shall:

1. Identify all property owners and property occupants, which include property owners or occupants affected or likely to be affected by the contamination that is the subject of the proposed Voluntary Remediation Project and all owners or occupants of adjacent or closely proximate land.
2. Identify all known or registered neighborhood organizations serving the location of the Voluntary Remediation Project, if any.
3. Identify all known or reasonably apparent sensitive community institutions within two (2) miles, including, but not limited to schools, health care facilities, child care facilities, senior citizen residential or care facilities and the administrative office or owner of parks and playgrounds.
4. Include a sample of a written notice to be sent to the property owners and property occupants, neighborhood organizations, and sensitive community institutions, which shall include:
 - a. the following paragraph: "This notice is being provided to inform you of the presence of a site in your neighborhood that has been accepted into IDEM's Voluntary Remediation Program. This notice is a requirement of a Community Relations Plan, which has been developed by the Applicant and is a component of the Remediation Work Plan that is available for review at the repository listed below. The Community Relations Plan includes provisions for notifying all neighboring property owners and occupants, neighborhood organizations and other local entities. In addition, the Community Relations Plan may require the applicant to post an informational sign at the subject property. For additional information about the Community Relations Plan and the Remediation Work Plan please review the documents in the repository or contact the IDEM Project Manager at (317) 234-0973.";

- b. a short description of the work to be performed;
 - c. information concerning the public comment period, including the time period and procedures for public comment, and the address to which comments are to be directed. (The sample need not include the dates of the public comment period, as they will not be known when the Remediation Work Plan is drafted; however, the actual notices that are sent out must include these dates.); and
 - d. the location of the record repository where the Remediation Work Plan has been placed.
5. Provide the name(s) and mailing address(es) of all affected local governmental units with jurisdiction within one (1) mile of the property affected by the proposed Remediation Work Plan.

IDEM will notify the affected local government units about the VRP Project and the anticipated remediation at the time IDEM signs the Voluntary Remediation Agreement. In addition, local government units that are affected by the proposed VRP Project will be notified by IDEM of the Remediation Work Plan and the beginning of the public comment period as soon as an internal review of the document has been completed. These local government units will include government units located in the county of the project as well as those within one (1) mile of the project but in another county. The Participant should also include a listing of any other governmental units that they wish to have notified of the project.

6. Provide the name(s) and mailing address(es) of the newspaper(s) or other appropriate circulars in which notice of the public comment period will be published.
7. Identify the location of the public library and other public repositories in which a copy of the proposed Remediation Work Plan will be placed. The proposed Remediation Work Plan must be placed in the public library closest to the site and in the county or counties affected by the project. If more than one repository is selected, the participant shall provide one additional copy of the proposed Voluntary Remediation Work Plan for each additional repository.
8. In addition, VRP Participants shall post a sign that:
 - a. identifies the location as a Voluntary Remediation Program cleanup site;
 - b. gives the IDEM VRP site number, the VRP phone number and the VRP web site address;
 - c. shall meet the following criteria:
 - 1) be visible/readable from 20 feet;
 - 2) be in English and the language predominantly used in the neighborhood if other than English; and
 - 3) place one sign per site access point; and
 - d. shall be posted starting with the end of the public comment period for the Remediation Work Plan, before any work begins and remain posted until the Covenant Not To Sue has been issued.

The VRP Participant shall identify all posting locations and the text of the information to be included on the sign in the Community Relations Plan.

Exceptions to Section 8 (above) will be considered by IDEM on a site-specific basis if there is a compelling reason for not posting a sign and it is stated in the Remediation Work Plan. Examples of potential exceptions are:

- a. the site already meets targeted cleanup objectives;
 - b. no active remediation is occurring or the cleanup is of short duration;
 - c. The VRP participant has made a reasonable effort to notify affected parties in some other acceptable manner such as but not limited to, certified mail, door-to-door canvassing, or a well-publicized informational meeting open to the public;
 - d. public display of a sign would negatively impact a retail business by keeping customers/visitors away (this impact must be demonstrable);
5. The site is located in an area where passers by could not see the sign or the site is otherwise inaccessible;
 6. there are no residents within one quarter (1/4) mile of the boundaries of the site;
 7. soil at the site is not being disturbed, and pits and piles are not created; or
 8. the site is secured (monitored, patrolled, adequately fenced) or operational at all hours of the day.

To implement the Community Relations Plan, IDEM will:

1. place a copy of the Remediation Work Plan at the public library and any other repositories specified in the Community Relations Plan;
2. notify the Affected Governments;
3. publish a notice requesting comments; and
4. set a public comment period of at least thirty (30) days.

Before the comment period begins, the Participant must mail, or otherwise provide in writing, the written notice as provided above, to all:

1. property owners;
2. property occupants;
3. neighborhood organizations;
4. sensitive community institutions; and
5. others requesting notification.

The participant must confirm in the VRP Completion Report that all the property owners, property occupants, neighborhood organizations, sensitive community institutions, and those requesting notification were sent the written notice of the public comment period.

(Note: For definitions of the terms, facility, site and area please refer to the RISC Technical and User Guides)