RESPONSE TO COMMENTS
&
FINAL DECISION

on the

REMEDIAL ACTION DECISION DOCUMENT (RADD)

Former Cedar Chemical Facility

Intersection of U.S. Highway 49 & Highway 242
Helena-West Helena
Philips County
Arkansas

AFIN: 72-00174

A. INTRODUCTION.

On February 24, 2010, the Arkansas Department of Environmental Quality – Hazardous Waste Division (ADEQ) proposed a Remedial Action Decision Document (RADD) for the Former Cedar Chemical Facility site located at the intersection of U.S. Hwy 49 and Hwy 242, Helena-West Helena, in Philips County, Arkansas. This RADD outlined the proposed remedy for the property.

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This Response to Comments and Final Decision addresses and documents for the public record the comments and issues raised concerning the notice of the RADD, provides ADEQ's response to the issues raised during the public participation process; and sets forth the final decision and approval of the RADD attached herein.

B. SELECTED REMEDY.

The selected remedy for the Former Cedar Chemical Facility site is set forth in the attached final Remedial Action Decision Document (RADD).

Within thirty (30) days of completing all activities outlined in the RADD, Potentially Responsible Parties (PRPs) shall submit to ADEQ for review and approval a completion report. The completion report shall include information to document that no unacceptable risks, as described in A.C.A. § 8-7-502, remain on-site as a result of the release of hazardous substances, and the site has been remediated in accordance with the provisions set forth in the RADD. The completion report shall be reviewed by ADEQ and, upon written approval by ADEQ, a letter of No Further Action will be issued.

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C. PUBLIC PARTICIPATION ACTIVITIES.

The ADEQ issued a public notice of the RADD on February 24, 2010. Notice was published in the Helena Daily World, and comments were accepted for a 30-day period. The public comment period closed on March 25, 2010. A public hearing was also held on March 16, 2010 at the UAMS Area Health Education Center in Helena-West Helena. Written and verbal comments were received prior to the end of the comment period.

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D. PUBLIC COMMENTS AND THE DEPARTMENT'S RESPONSE.

The thirty (30) day public comment period to make comments on the RADD ended March 25, 2010. Comments were received in the following letters:

- AECOM letter dated March 18, 2010
- Ann Faitz letter dated March 18, 2010
- Letter by concerned local citizen dated March 22, 2010
- Letter on behalf of Exxon/Helena Chemical dated March 25, 2010
- Letter on behalf of Harcros/Quapaw dated March 24, 2010
- Allen Gates' public hearing transcription which took place March 25, 2010 on behalf of Council Representing Helena Chemical Company.

ADEQ's responses follow each comment listed below. In addition, a copy of the comments received is included as an attachment.

Comments received from AECOM letter dated March 18, 2010:

Comment No. 1) Section 2, page 4, last paragraph. The statement "Due to lack of participation by Ansul. . ." is incorrect, as stated and should be deleted. Wormald fully participated in and complied with the Consent Administrative Order LIS No. 07-027 (CAO) by executing a Separate Agreement with the ADEQ on January 9, 2009. Wormald was never requested by ADEQ or required by the terms of the CAO to conduct a full site investigation for all contaminants at the site. With the full knowledge and approval of ADEQ, the requirements of the CAO and the Separate Agreement were satisfied through the completion of the following:

- *Wormald Site Investigation Work Plan* (AECOM, January 22, 2009),
- Wormald Site Investigation field work – completed March 4 and 5, 2009,
- *Wormald Site Investigation Report* (AECOM, originally submitted March 30, 2009; revised June 2, 2009), and
- *Focused Feasibility Study Report – Site 3* (AECOM, June 29, 2009).

> ***Response:*** *ADEQ will alter the statement as follows: "Due to lack of participation by Ansul . .." will be replaced with "Due to negotiations between the 3 PRP's ... "*

Comment No. 2) Section 3, page 6. ADEQ should reference the author, title and date of the report which is the source of Table 1.

> ***Response:*** *The author and title are listed in the title of Table 1. No change was made in the RADD*

Comment No. 3) Section 4, pages l7 through 19 and Tables 2A and 2B. The first sentence on page 17 states that "The [Facility Investigation] FI findings were used to identify Constituents of Concern (COCs) in on-site soil and in on-site and off-site groundwater." Based on the previous section, which discusses the findings of the 2009 FI (AMEC Geomatrix, February 2009), it appears this section is also referencing the 2008 FI.

The *Feasibility Study (FS) Report* (AMEC Geomatrix, December 2009) was generated based on the FI findings and includes the Center for Toxicology and Environmental Health (CTEH) *Derivation of Human Health (HH) Risk-Based Concentrations (RBCs)*, which is listed as being prepared for the ADEQ, in Appendix A. The *Derivation of HH RBCs* (CTEH, December 2009) provides a description of the methodology used to select COCs for each media and provides a list of COCs for each media in Tables1, 2, 3A, and 3B for soil, on-site perched zone groundwater on –site alluvial groundwater and off-site alluvial groundwater respectively. However there are discrepancies between the COCs listed in RADD Table 2A for soils and 2B for groundwater and those listed in the *Derivation of HH RBCs* (CTEH, December 2009). For example, in the *Derivation of HH RBCs*, dinoseb was selected as a COC based on the direct-contact pathway and for on-site soils only, but is included as a COC in the RADD for on-site perched zone groundwater and on-site alluvial groundwater (Table 2B). Other chemicals, such as bis(2-ethylhexl)phthalate, heptachlor, and methoxychlor, are also selected as COCs for perched zone groundwater in Table 2B of the RADD, although they were not retained as COCs in the *Derivation of HH RBCs*. Furthermore, chemicals, such as chloroethane and 1,3-dichlorobenzene, were selected as COCs for on-site alluvial aquifer groundwater in the *Derivation of HH RBCs* but were not included as COCs in Table 2B of the RADD. The rationale for these changes and/or variations in COCs between these documents is not provided and leads to confusion.

AECOM recommends that the COCs presented in tables 1, 2, 3A, and 3B of the *Derivation of HH RBCs* (CTEH, December 2009) be adopted for the purpose of the RADD and that corrections be made to ensure COCs are approximately matched to media at the Site. Alternately, ADEQ should (a) provide detailed scientific and technical rationale supporting the decision to include the COCs identified in Tables 2A and 2B of the RADD rather than those identified in the *Derivation of HH RBCs* (CTEH, December 2009); (b) provide reference(s), with document name and page number, for the investigative document(s) or report(s) which are the source(s) for Tables 2A and 2B; and (c) provide references for all scientific literature, investigative reports, and findings upon which ADEQ relied to identify the COCs in Tables 2A and 2B in the RADD.

Response: *For clarification, findings from the February 2009 FI and the December 2009 FS, which includes Derivation of Human Health Risk-Based Concentrations, were used to identify COCs in the RADD. The Derivation of HH RBCs in the December 2009 FS did not include chemicals in subsurface soil that exceed the protection of soil to groundwater screening levels. Since there are chemicals in site subsurface soils that exceed the protection of soil to groundwater screening levels (DAF 20), they are included as COCs in Table 2A of the RADD, in addition to chemicals in soil that exceed health-protective screening levels. The COCs in subsurface soil were selected from the finding presented in the February 2009 FI. The Derivation of HH RBCs in the December 2009 FS only included COCs in perched zone groundwater via the vapor intrusion pathway. However, all groundwater is considered a source of potable water and these chemicals in on-site perched zone groundwater serve as a source of contamination to the alluvial aquifer. Therefore, chemicals in on-site perched zone groundwater with concentrations that exceed MCLs or Tap Water Screening Levels (based at 1E-05) are listed as COCs on Table 2B of the RADD. Dinoseb was included as a COC on Table 2B of the RADD for on-site alluvial groundwater because concentrations in the February 2009 FI exceed the MCL.*

Due to this comment, during ADEQ's review of the list of COCs, it was noted that Chloroethane and 1,3-dichlorobenzene was mistakenly omitted from list of COCs in the on-site alluvial aquifer on Table 2B in the RADD. These two chemicals have been included on Table 2B (Constituents of Concern in Groundwater) and Table 5D (Remedial Action Levels for Chemicals of Concern in On-Site Alluvial Groundwater) of the final RADD. Additionally, the Industrial Tap Water RBCs for On-Site Alluvial Groundwater and On-Site Perched Groundwater have been revised to reflect more appropriate industrial conditions in the final RADD. Also during the review of the COCs in sub-surface soil it was noted that Dinoseb was also mistakenly omtted in tables 2A and 5B. Dinoseb does not have a soil to groundwater screening value in the USEPA Soil Screening Guidance: User's Guide and Technical Background Document, 1996. Dinoseb was included in these tables in the final RADD based upon the MCL- based soil to groundwater protection value (DAF 1).

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Comment No. 4)

Section 6, page 20, Table 3A. The list of remedial alternatives considered for on-site soils lists "no further action" as the only remedy considered for Site 3 soils and appears to reference the *Focused FS Report - Site 3* (AECOM, June 2009). This phrase is incorrect and should be deleted. As a point of clarification, the referenced report addressed residual concentrations of dinoseb in Site 3 soils exclusively, with the acknowledgement and approval of ADEQ, and the remedies discussed there in were only considered with respect to dinoseb concentrations - they did not consider other COCs that may potentially be present in soil at Site 3 or anywhere else on or on-site or in groundwater. As such, application of the findings of the *Focused FS Report - Site 3* (AECOM, June 2009) to other COCs or media in the RADD is inappropriate. Moreover, the *Focused FS Report –*

Site 3 evaluated multiple remedies, including no further action, institutional controls (exposure controls), institutional controls with down-gradient groundwater monitoring, and an engineered barrier with institutional controls and down-gradient groundwater monitoring, before recommending institutional controls as the preferred remedial alternative for residual dinoseb concentrations in subsurface soil at Site 3.

As a standalone entity in Table 3A of the RADD, this table should be corrected to accurately reflect the three alternatives that were considered for residual dinoseb in soil at Site 3. At a minimum, the table should be corrected to accurately reflect the alternative that was presented in the conclusion of the *Focused FS Report – Site 3* for residual dinoseb in soil – Institutional Controls.

> ***Response:*** *The Site 3 FS contributed very little to the remedial alternatives selected in the RADD. The Site 3 FS and other reports submitted on behalf of Wormald are acknowledged in the introduction. Table 3A has been revised to include alternatives listed in the AMEC FS Report. Other places throughout the RADD have been revised as well. Please note ADEQ does not view Institutional Controls as a remedial activity and therefore are not considered a stand alone remedy.*

Comment No. 5)
Section 7, page 22, first paragraph. This statement "no action" inaccurately reflects the recommendation made in the conclusions of the *Focused FS Report – Site 3* (AECOM, June 2009). Please see previous comment for additional information regarding the findings of the Site 3 FS. This statement should be revised to reflect the recommendation of "Institutional Controls" as the preferred remedy for residual dinoseb concentrations in soil at Site 3. Furthermore, the statement should specify that the AECOM recommendations are applicable to residual concentrations of dinoseb in subsurface soil only, and do not consider other constituents that may be present in soil at Site 3 or in other areas of the Site.

> ***Response:*** *ADEQ acknowledges that AECOM proposed recommendations other than "no action" to address Site 3. The text has been revised in the aforementioned section to reflect this. However, please note ADEQ does not view Institutional Controls as a remedial activity and therefore are not considered a stand alone remedy.*

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Comment No. 6)
Section 8, page 25, last paragraph, first bullet and Section 10, page 34, paragraph 3. It is unclear why the remediation area identified for soil stabilization in Figure 8B has been expanded by ADEQ in the RADD from the *FS Report* (AMEC Geomatrix, December 2009) and why dinoseb has been identified as the reason for expanding the remediation area for the remedies described in the RADD. Dinoseb was selected as a COC for on-site soils in the *FS Report* (AMEC Geomatrix, December 2009) and in the RADD based solely on the direct contact exposure pathway. Exposure controls, such as deed

restrictions to secure the facility area, to limit future land use to the industrial scenario, and to restrict intrusive activities and/or to require the use of personal protective equipment (PPE) during intrusive activities, should be sufficient to control exposure to dinoseb and the identified direct contract risk. There does not appear to be any justification provided for expansion of the area identified for soil stabilization or an explanation for why dinoseb is the reason for the expansion.

AECOM requests that this point be clarified by ADEQ to explain in detail the scientific and technical justification and rationale behind this decision to expand the remediation area due to dinoseb, and provide the appropriate scientific literature, investigative documents, and/or reports relied upon by ADEQ for this decision. AECOM recommends that the expansion of the area and/or the reference to dinoseb as the reason for expanding the area for soil stabilization be removed from the RADD.

> ***Response:*** *Dinoseb was retained as COC for on-site perched groundwater (Table 5C of the RADD). Therefore it was warranted to address dinoseb in the sub-surface soil to limit the infiltration to the groundwater. The area outlined for stabilization in the RADD has been expanded because significant dinoseb concentrations were found in the areas adjacent to the area outlined by AMEC.*
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> *In addition, the area outlined for stabilization in the RADD located in the northern portion of the facility was expanded to encompass SWMUs directly north of the production units. No change to the final RADD is warranted.*

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Comment No. 7)
Section 8, page 25 and Section 10, page 34. Soil remedy alternatives address on-site soils as a whole and do not differentiate between remedies designed to address a particular exposure pathway (i.e., direct exposure pathway vs. vapor intrusion pathway). The COCs identified for each pathway exhibit very different physical properties and, as such, the selected remedies are not necessarily applicable or appropriate for all contaminants/pathways. For instance, soil vapor extraction may address the vapor intrusion pathway for 1,2-DCA, but would not be necessary to implement to address those constituents, such as dinoseb, which are only identified for potential exposure via the direct contact pathway. Institutional controls (i.e., land use controls, deed restrictions, and site security measures) should be sufficient on their own to control direct contact exposure to dinoseb in on-site soils. AECOM requests that the ADEQ amend the RADD to include a list of COCs and exposure pathways addressed by each proposed remedy.

> ***Response:*** *The nature of each remedy demonstrates what pathway a particular remedy addresses. Soil Vapor Extraction will not remediate dinoseb. However in-situ stabilization should prevent further migration of dinoseb and volatile organic compounds into the alluvial aquifer. Due to the continual sourcing of dinoseb and other COCs to groundwater, institutional controls alone are not adequate remedial actions. Three separate tables are not necessary to*

understand the intent of the RADD. The data used to chose the areal extent of each remedy can be found in the AMEC FI.

Comment No. 8)
Section 8, page 28, Table 4D. The basis for the recommendation to remove all above-ground structures is unclear. The recommendation does not appear to be based on controlling exposure risk, since no COCs or exposure pathways are identified for the remaining structures. Furthermore, all columns of the table are blank except for "capital cost", so the remedy does not appear to have been evaluated with respect to the criteria outlined on page 25, paragraph 1. The January 2003 USEPA Region 6 removal action addressed "chemicals left at the Facility in tanks and containers" as discussed on page 3, paragraphs 6 and 7 of the RADD.

Based on this information, we do not believe there is enough information to justify razing all aboveground structures. ADEQ should consider that if particular above-ground structures need to be razed to implement selected remedies, as discussed on page 36, paragraph 2 of the RADD, the demolition could be implemented on a case-by-case basis for a lower cost. ADEQ should provide its scientific reasons and rationale for the necessity to remove all above ground structures when there is at least one viable buyer for the facility, Harcros Chemical, who has need to use at least some of the on-site structures, and removing the structures will eliminate the purchase or lease of the facility to any potential industry who may make use of the facility, redevelop the facility, and offer jobs to the community.

Response: *An agreement has not yet been made with a prospective purchaser/leassee since the site was abandoned in 2002. ADEQ selected remedial alternatives assuming the site will continue to remain abandoned. Razing structures will aid in implementing remedial alternatives in some areas. ADEQ is still open to negotiations with prospective purchasers/leassees and will consider other alternatives if an agreement is made. Also if a sale or lease agreement is implemented prior to demolition, some of the structures may remain on the site. No change will be made to the RADD until a lease/purchase agreement has been implemented.*

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Comment No. 9)
Section 9, pages 30 through 33, Tables 5A through 5E. The RADD does not reference the source of the Remedial Action Levels (RALs) for the COCs for Site media presented in Tables 5A through 5E. The RALs for COCs in on-site soils appear to be in agreement with those presented in Table 4 of the *Derivation of HH RBCs* (CTEH, December 2009) for most COCs; however, the Direct Contact RBC for 1,2-DCA presented in Table 5A of the RADD (22 mg/kg) is double the value presented in Table 4 of the *Derivation of HH RBCs* (CTEH, December 2009). With the exception of the Vapor Intrusion RBCs presented in Table 5C of the RADD, which appear to correspond with the values presented in Table 5 of the *Derivation of HH RBCs* (CTEH, December 2009), and the Maximum Contaminant Levels presented in Tables 5C through 5E, there is no explanation as to the methodologies or references used to determine the remaining RALs

in Tables 5A through 5E. Furthermore, it is unclear if the RBCs presented in these tables are site-specific calculated values or regional screening levels. AECOM requests that the ADEQ amend the RADD to add (a) an explanation of the rationale for selection of the RALs in Tables 5A through 5E; (b) the methodologies used for calculation site-specific RALs (if applicable); and (c) references to technical guidance, standards, or reports used to generate the RALs.

> ***Response:*** *RALs in Table 5A for the RADD were taken from Table 4 of Derivation of HH RBCs (CTEH, December 2009). With the exception of 1,2-DCA (which is discussed below), the Direct Contact RBCs in Table 5A were based on equations (at 1E-05) from USEPA Guidance using default inputs for the on-site long-term worker and appropriate inputs for the construction worker. RALS in Table 5B were taken from USEPA Soil Screening Guidance: User's Guide and Technical Background Document, 1996. Residential and Industrial Tap Water RALs in Tables 5C-5E were based on default exposure parameters and factors that represent Reasonable Maximum Exposure (RME) conditions for long-term/chronic exposures and are based on methods outlined in EPA's Risk Assessment Guidance for Superfund, Part B Manual (1991).*
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> *In Table 5A of the RADD, ADEQ used default assumptions for the RAL of 22 mg/kg for 1,2-DCA. Because 1,2-DCA is sensitive to geographic location and size of the area affected, site-specific RBCs were calculated in the Derivation of HH RBCs (CTEH, December 2009). Therefore, the final RADD has been changed using the more protective and site-specific Direct Contact RBC of 10.9 mg/kg for 1,2-DCA. RBCs for direct contact were calculated for the industrial worker and the construction worker. The more protective RBC from these two receptors was used.*

Comment No. 10)

Section 9, page 31, last paragraph and page 32, Table 5C. It is unclear why maximum contaminant levels (MCLs), residential tap water RBCs, and industrial tap water RBCs are included in Table 5C as RALs for COCs in on-site perched zone groundwater. As stated in the correspondence from AMEC Geomatrix to ADEQ on October 14, 2009 entitled *Response to Comments on the FS Report for Cedar Chemical Corporation* (Email Date of September 10, 2009), "the Perched Zone yields insufficient water to be used as a potable or industrial water supply" (page 2, first paragraph). As such, drinking water standards and tap water risk-based criteria are not applicable to the intermittent perched zone groundwater in this area.

Considerations for current land use and groundwater use designation are included in the *Ground Water Remediation Level Interim Policy and Technical Guidance* (ADEQ, July 12, 2009), available via a link from the ADEQ Hazardous Waste Division website (http://www.adeq.state.ar.us/hazwaste/default.htm), and the USEPA Region 6 Corrective Action Strategy (CAS; November, 2008), available via a link from the ADEQ Hazardous Waste Division- Arkansas Corrective Action Strategy website

(http://www.adeq.state.ar.us/hazwaste/branch_tech/cas.htm).Page 2, paragraph 4 and page 4, Section III (c) of the *Ground Water Remediation Level Interim Policy and Technical Guidance* (ADEQ, July 12, 2005) state that "Consideration will be given to the current and reasonably anticipated future land use (including ground water usage)" when establishing goals for groundwater remediation. Page 6, paragraph 2 of the guidance states that "in cases where the designated use differs from the actual or reasonably anticipated use; the remediation standard may be based on an acceptable risk range. The acceptable risk range shall be based on protection of human health and the environment." The USEPA Region 6 CAS (November 2008) states that "current land use conditions should be emphasized when evaluating exposures at commercial/industrial facilities because for most of these facilities, current land use is assumed to continue into the foreseeable future" (page 51). The use of MCLs as the RALs for on-site perched zone groundwater does not appear to take these considerations into account. Current land use is industrial and no perched zone or alluvial aquifer drinking water wells exist within the Site. Institutional controls is a reasonable remedy to be put in place within the Facility boundaries to limit certain land-use scenarios, to restrict perched zone groundwater use within the Facility boundary, and/or to require PPE for intrusive activities, thus mitigating the risk of incidental exposure through the direct-contact scenario.

AECOM recommends that (a) institutional controls (e.g., deed restrictions) be put in place within the Facility boundary to prohibit the installation of groundwater wells in the perched zone; and (b) remedial actions levels for non-volatile compounds in perched zone groundwater should be based on the risk of incidental exposure to potential future construction workers through the direct-contact exposure pathway. Furthermore, institutional controls and long-term monitoring should be sufficient to mitigate risks for chemicals, such as dinoseb, identified as COCs for the perched zone that (a) have not been identified as COCs in off-site groundwater and (b) exhibit declining concentration trends. For perched zone and on-site alluvial aquifer COCs that meet these criteria, a limited remedy, which couples institutional controls to restrict groundwater use and to limit exposure and long-term monitoring to verify that concentration trends continue to decline and migration does not occur, should be included in the RADD.

ADEQ should provide its rationale for not accepting these recommendations and consider this information before the RADD is finalized.

> ***Response:*** *The Cedar site is not participating in the Corrective Action Strategy (CAS) program; therefore the strategies outlined in the CAS are not necessarily applicable to the site. However, the June 26, 2009 OSWER Directive 92831-33 applies to this site. Institutional controls on the property cannot prevent the further contamination of the deeper aquifer and cannot protect future workers from exposure to contaminated media. Institutional controls alone are not considered remedial actions. Therefore, no change to the final RADD is warranted.*

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Comment No. 11)

Section 10, page 34: ADEQ should provide its scientific and technical rationale and reference to the appropriate scientific literature and/or reports as to (a) why it did not adopt the conclusions and remedies presented in the *Comprehensive Site Assessment* (ADEQ, April 2004) for SWMUS 63-73 and AOC 1 rather than the remedies provided in the RADD (ADEQ, February 2010) for those areas; and (b) why it did not adopt the conclusions and remedies proposed in the *FS Report* (AMEC Geomatrix, December 2009) and the *Focused FS Report - Site 3* (AECOM, June 2009) for SWMUs 63-73 and AOC 1 rather than those provided in the RADD.

Response: *ADEQ provided the rational for choosing the remedial options in Tables 4A through 4E. All remedial alternatives were carefully considered and compared to the criteria outlined in the National Contingency Plan. 40 CFR §300.430(a)(ii)(F) states "EPA expects to return usable ground waters to their beneficial uses whenever practicable, within a timeframe that is reasonable given the particular circumstances of the Site. When restoration of ground water to beneficial uses is not practicable, EPA expects to prevent further migration of the plume, prevent exposure to the contaminated ground water, and evaluate further risk reduction." Therefore, no change to the final RADD is warranted.*

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Comment No. 12)

Section 10, page 34 through 36. The RADD does not specify a schedule for implementation or specify whether or not a phased approach has been considered for the Site. For chemicals that have been identified as COCs due to potential risk via the direct-contact pathway for on-site soils, institutional controls (e.g., deed restrictions, land use restriction, PPE-requirements for intrusive activities) and exposure controls (i.e., low-permeability cover) should be sufficient to mitigate the risk. Hot spots could be treated with in-situ stabilization and/or soil vapor extraction (SVE), as applicable for the specific COC, to reduce residual source material for COCs identified for the soil-groundwater exposure pathway. For COCs identified in on-site media, a phased approach using these components could be implemented and long-term groundwater monitoring/monitored natural attenuation (MNA) could be used to monitor the remedies for their effectiveness in reducing on-site groundwater concentrations. If these low-cost remedies were sufficient in reducing concentrations, a more aggressive and more expensive approach would not be needed. Furthermore, additional monitoring data collected during the initial phase could be useful in the design phase if a more aggressive approach was needed.

AECOM requests that the ADEQ include a schedule for how the remedies will be implemented in the final RADD. Furthermore, AECOM requests that ADEQ consider a phased approach for COCs in on-site media when developing the final RADD.

Response: *ADEQ will operate on the presumption that remedies outlined in the RADD will be pursued. Therefore, there is no need to look at a phased approach where remedies are put in place prior to implementing a more aggressive remedy. A schedule is not included in the RADD. A schedule will be included in the legal document requiring implementation of the RADD. Therefore, no change to the final RADD is warranted.*

Comment No. 13)
General comment. It is our understanding that there is a potential buyer for the Site, Harcros, who intends to use the Site for industrial use and ADEQ is currently negotiating with Harcros for it to acquire the Site. The USEPA Region 6 CAS (November 2008), which is available via a link from the ADEQ Hazardous Waste Division - Arkansas Corrective Action Strategy website (http://www.adeq.state.ar.us/hazwaste/branch_tech/cas.htm), states that "under the CAS screening process, the receptors for the commercial/industrial scenario are limited to generic on-site worker (indoor worker and outdoor worker). There is no requirement under this land use category to evaluate exposure to members of the public" (page 52). Page 53 of the CAS states that the "EPA prefers to rely on states to develop ground water use designations and will generally defer to a state's designation of groundwater classification and use when developing cleanup objectives". Page 54 of the CAS states that "if an aquifer is not a drinking water resource, does not have any other beneficial resource attributes, does not impact indoor air, does not contaminate surface water, or does not contaminate a drinking water aquifer, then the level of protection (e.g., MCL or alternate concentration limit (ACL)) to be met at, within, or beyond the facility boundary will be determined in consultation with the administrative authority." Finally, page 11 and Appendix A, page 9 of the CAS state that "For instances where groundwater is not a drinking water source, is not a beneficial resource, or in instances in which restoration is not practical, the expectation is that human health and the environment must be protected at the point of exposure (POE). If a state does not consider groundwater beneath a facility to be a beneficial resource, the POE may be placed at the facility boundary." The CAS provides scenarios for placing the POE at the facility boundary and beyond the facility boundary (Appendix A, page 11): "In Figure A-4 the POE is determined to be at the facility boundary (where land use is industrial), offsite land use beyond the boundary is residential" and "Figure A-6 describes the case where groundwater is not a beneficial resource and both onsite and offsite properties are classified as industrial."

Based on the information provided in the USEPA Region 6 CAS (November 2008), AECOM respectfully requests that either the ADEQ (a) amends the RALs to RBCs for on-site perched zone and on-site alluvial aquifer groundwater in the final RADD and shifts the POE (and applicability of MCLs) to the Site boundary or beyond, or (b) provides a detailed rationale and technical explanation for using MCLs as the RALs for on-site groundwater in the final RADD.

> ***Response:*** *Please note that there is no Memorandum of Agreement for the Cedar Chemical Site to utilize the Corrective Action Strategy. ADEQ does consider the groundwater beneath the facility to be a beneficial resource as it is used to irrigate agricultural fields near the facility. Also, all waters of the State are considered potable unless otherwise designated. Therefore, ADEQ set the clean-up levels outlined in the RADD to be consistent with Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) policy. The document, OSWER Directive 9283.1-33, June 26, 2009 documents*

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the authorities, for the policies outlined herein. Note that although OSWER Directive 9283.1-33 was published recently, it is only a summary of the policies promulgated in CERCLA, as implemented by the National Oil and Hazardous Substance Pollution Contingency Plan (NCP). Therefore, no change to the final RADD is warranted.

Deleted: *See Enclosure: EPA OSWER Directive*

Comments received from Ann Faitz letter dated March 18, 2010:

Comment No. 1)
FactSheet: Wormald has many times in the past advised ADEQ as to the status of Ansul's involvement at the Cedar Site, however some of the information remains incorrect in the RADD. The historical evidence and documentation located in ADEQ's files, at the Cedar Site, and in previous litigation involving the Cedar Site (referred to as "historical documents") show that Par. 4 of the Fact Sheet should be revised as follows:

Par. 4 of the Fact Sheet should be revised as follows:

The Facility was constructed and initially owned and operated by Helena Chemical Company in 1970 for the production of propanil. The Facility was purchased by Jerry Williams, president of Helena Chemical Company, who, formed Eagle River Chemical Company, which owned and operated the Facility beginning in September 1971. Ansul states on its website that it acquired Eagle River in 1971. From September 15, 1971 to November 15, 1972, Ansul was a majority shareholder in Eagle River and Jerry Williams was a minority shareholder, during which time dinoseb was produced on the site. Jerry Williams became sole shareholder on November 15, 1972 when Ansul sold its shares back to him. Helena Chemical Company had various plant managers at the Facility from November 1972 to 1976, during which time methoxychlor, lannate and 1,2 - dichloroethane, in addition to other chemicals, were produced on the Site for various toll manufacturers. 1, 2 -dichloroethane was produced at the Site beginning in 1975 pursuant to a contract with Mobil Oil. The Facility from 1970 to 2002 manufactured ...

If ADEQ does not agree with the above summary and the dates provided, it should reference and produce all of its documented evidence and justification for the dates and description of ownership/operation that it has provided in the Fact Sheet.

> ***Response:*** *Comments were solicited on the RADD not on the Fact Sheet. The former ownership of the facility is currently under dispute. The summary provided in paragraph 4 of the fact sheet will remain unchanged. Therefore, no change to the final RADD is warranted.*

Comment No. 2)
Introduction, page 1, par. 3: Exxon, HCC and Ansul voluntarily entered into a consent order, CAO LIS 07-027 with ADEQ - the CAO was not issued to them. Wormald admits that currently it is the successor to Ansul as referenced in the Introduction. Par. 3 should be revised as follows:

"On March 22, 2007, ADEQ.... entered into Consent Administrative Order (CAO) LIS 070927 with Tyco Safety Products LP, formerly known as Ansul, Incorporated, formerly known as Wormald U.S., Inc. (Ansul) ... "

See also Site Background, page 4, par. 2, which should be revised to state that ADEQ entered into a CAO with the other Parties and delete the word "issued."

> ***Response:*** *The changes regarding the reference to Tyco and former owners are acknowledged and have been changed in the final RADD. ADEQ issued the CAO to all parties and the term entered will not be substituted in the language of the final RADD.*

Comment No. 3)
Site Background, page 2, par. 3: Certain dates and ownership references in par. 3 do not correlate with documentation in historic files and should be revised as follows:

"After Ansul left the Site, beginning in November 1972 to about 1976, Helena had its own plant managers at the Site, during which time the Facility was known as Eagle River Chemical and during which time Helena Chemical built and began using three unlined surface impoundments ..."

If ADEQ does not agree with the above, it should reference and produce all of its documented evidence and justification to show that Vertac, rather than Helena Chemical, operated the Site from 1972 to 1973.

> ***Response:*** *The operation of the facility in the 1970's has been disputed. The paragraph regarding Vertac's operation during the 1970's has been deleted from the RADD.*

Comment No. 4)
Site Background, page 5, par. 1: Similar to the description for Exxon and HCC regarding its Separate Agreement, par. 1 should be revised and clarified as follows:

"Pursuant to Par. V. 20 of the CAO, Ansul entered into a Separate Agreement with ADEQ on January 9, 2009 to conduct a further investigation of Site 3."

> ***Response:*** *The changes have been made as requested in the final RADD.*

Comment No. 5)
Summary of Remedial Approach, page 5, par. 1: Both AMEC Geomatrix and . AECOM FIs and Feasibility Studies were submitted pursuant to the CAO and both should be referenced. Par. l should be revised as follows:

"There was extensive investigative work performed at the Facility prior to the 2008 FI (AMEC Geomatrix, February 2009), the FS Report (AMEC Geomatrix, December 2009), the Wormald Site Investigation (AECOM, June 2009) and the Focused FS Report (AECOM, June 2009). The FIs were necessary to obtain information to fill data gaps. . . "

Response: *The changes have been made as requested in the final RADD.*

Comment No. 6)
Summary of Remedial Approach, p. 6, par. 2: ADEQ references "previous investigations" for its Table 1. ADEQ should provide the title and date of the investigation reports that it is relying upon for the information provided in Table 1 and Figure 3.

Response: *The source of information is located in the title of Table 1 and in the title block of Figure 3. Therefore, no change to the final RADD is warranted.*

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Comment No. 7)
Table 1, page 16: While the description for AOC 1 is apparently correctly cited, some of the information in the conclusions is not consistent with historic documentation. As stated previously, Ansul's involvement was only from Sept. 15, 1971 to November 15, 1972 when dinoseb was produced at the Site.

Response: *As noted in Table 1, the response is EPA's conclusion reached for each SWMU. The information provides justification for including the area of concern in future facility investigations. It is stated in Table 1 that the information came from a facility representative. ADEQ has other documentation showing that the Ansul owned two-thirds of the stock of Eagle River Chemical Corporation from about September 1971 until November 1973. (Cedar Chemical Corporation V. Wormald U.S., Inc. No. E-91-349, Phillips County Chancery Court). Therefore, no change to the final RADD is warranted.*

Comment No. 8)
Tables 2A and 2B, pp 17-18: ADEQ should provide the title and date of the investigation reports that it is relying for the information provided in Tables 2A and 2B.

Response: *The text preceding the tables provides adequate references that were used to develop Tables 2A and 2B. Therefore, no change to the final RADD is warranted.*

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Comment No. 9)
Recommended Remedy for Drum Vault, page 23: The COCs which are proposed to be remediated and referenced in the RADD for the drum vault as those "identified at concentrations that exceeded a regulatory level" should be specifically identified by ADEQ.

Response: *Although sampling has been conducted at the drum vault, the amount of sampling did not fully characterize the waste. The characterization sampling preformed during disposal will identify the potential COCs associated with the drum vault. If additional COCs are identified that are not included in the final RADD, the levels will be established at that time. Therefore, no change to the final RADD is warranted.*

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Comment No. 10)
Sec II Schedule of Implementation, page 36: It is unclear as to identity and scope of persons or entities ADEQ is referring to by the term "known PRPs" since they are not named nor identified. In any event, it does not appear that any person or entity has been found to be a potentially responsible party (PRP) for the contamination or remedial action identified in the RADD either by ADEQ or by a court, nor has any person or entity admitted to such liability. Further any persons that may be found liable are not jointly and severally liable under the Arkansas Remedial Action Trust Fund Act (RATFA), under which this RADD is issued. Rather, it is the clear purpose and intent of RATFA to allocate responsibility equitably among liable parties for their allocated share pursuant to statute. As such, ADEQ has no authority to make a general requirement in the RADD to all "known PRPs" to submit plans and/or take action under the RADD and Wormald objects to this requirement. ADEQ should identify all the persons or entities to which it is addressing this directive, and provide a detailed legal justification to support its authority to impose this .requirement in the RADD to "known PRPs."

> ***Response:*** *ADEQ has not determined the Potential Responsible parties at this time. The term "known PRPs' has been changed to "PRP's" in the final RADD.*

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Comment No. 11)
Administrative Record (AR), page 37: Since the RADD includes facts regarding ownership and/or operation of the Site; all documents upon which ADEQ relies evidencing that history should be made part of the AR. All documents listed as part of the AR should include the official title, author, and date of each document to avoid confusion. Further, all of the investigations which have been undertaken at the Site since 1990 and all related correspondence of such investigations, including, but not limited to, correspondence between ADEQ and Cedar, should be included in the AR.

> ***Response:*** *The administrative record listed in the RADD includes documents used to develop remedial decisions. The RADD is not intended to resolve any ownership or operational disputes. Therefore, no change to the final RADD is warranted.*

Comment No. 12)
General Comment regarding Site Redevelopment and Section 8, p. 28: Harcros Chemical is a potential buyer for the Site and has been actively negotiating with ADEQ to redevelop the Site for industrial use for various purposes, including reuse of equipment and buildings on site for chemical production and other activities. This redevelopment will create new, much needed jobs for the community, It is our understanding that Harcros does not desire the buildings to be razed as set out in the RADD (at a proposed cost of over $4M), but desires many of the building to remain for its reuse. Doing so would enable Harcros to redevelop the Site and create jobs, which would in turn lower the cost of proposed cleanup, and all which could be accomplished without adversely

affecting public health and the environment. Wormald supports Harcros' redevelopment of the Site and strongly urges ADEQ to work with Harcros and finalize the plan for redevelopment prior to finalizing the RADD. The RADD should be modified in keeping with redevelopment of the Site.

We request that ADEQ provide a detailed explanation as to the reasons why razing of the buildings as proposed in the RADD is necessary to protect human health and the environment; and, if this is a stumbling block to approving Harcros' proposal, the reasons why ADEQ refuses to allow Harcros to keep certain buildings to redevelop the Site.

> ***Response:*** *An agreement has not yet been made with a prospective purchaser/leasee. ADEQ selected the remedial alternatives assuming the site will continue to remain abandoned. Razing structures will aid in implementing remedial alternatives in some areas. ADEQ remains open to negotiations with prospective purchasers/leasees and will look at other alternatives if an agreement is made. Therefore, no change to the final RADD is warranted.*

Deleted: *The site was abandoned in 2002.*

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Comments received from Letter by Charles M. Tappan dated March 22, 2010:

After attending the recently held public meeting on the above mentioned, I feel that more needs to be done to save some of the manufacturing capabilities of the existing plant. The plant is comprised of several manufacturing units. I understand that several of the units exist above sources or significantly contaminated earth that requires their removal. However, some of the units could be left in place and worked around. This approach would allow the site to be re-mediated without destroying all units and would leave some marketable value with the site.

When Cedar was in operation, it employed well over 100 people with an average annual salary of @ $54,000. With a drive thru our community, one can visibly see the void the loss of these jobs has created. These types of jobs will be lost forever, if all units are demolished and the site is left as a large asphalt pad.

Please visit with -the companies previously interested in redevelopment of the site and discuss which units bring marketable value to the site. Discuss the assets of the site with ADED for their input on what would bring the best value to the site. This information could be used to modify the RADD for inclusion to provide the best outcome for the State of Arkansas and Phillips County.

One company was at the meeting that has a current proposal for the sites re-development. I urge ADEO to work with this company to modify the RADD and move forward on their plan for redevelopment. If the RADD goes without modification, the chances for getting a viable company to re-develop the site are very slim. There are many sites in our state that have fewer issues and many sites in our state that have fewer issues and many more assets that are attractive to the businesses our state needs.

Please seriously consider my comments, as the future economic health of our community could be dependent on this important decision.

> ***Response:*** *ADEQ greatly appreciates your concern for Phillips County and your community as well as the desire to see the Cedar Chemical Company Site cleaned up and redeveloped. ADEQ looks forward to the day the Cedar Chemical Company Site is clean and restored. Again, thank you very much for taking the time to share your concerns and support. ADEQ will to continue to work with potential site redevelopers to see that the site can successfully be reutilized in a manner that will be protective of human health and the environment. No change to the final RADD is warranted.*

Comments received from Letter on behalf of Exxon/Helena Chemical dated March 25, 2010:

Comment No. 1)
ExxonMobil and Helena Chemical Company Agree with the Draft RADD insofar as it follows the Analysis and Remedial Recommendations of the Feasibility Study Prepared by AMEC Geomatrix.

ExxonMobil and Helena Chemical Company believe that the Current Conditions Report ("CCR") and Facility Investigation Report ("FIR") submitted to ADEQ by AMEC Geomatrix represent an accurate analysis of environmental conditions related to the Cedar Chemical Corporation Site. ADEQ approved the CCR and the FIR in their final form; and the Draft RADD appears to reaffirm that approval. *See* Draft RADD at p. 4.

The Feasibility Study submitted by AMEC Geomatrix assessed a comprehensive list of remedial alternatives that might be considered to address the environmental conditions identified in the CCR and FIR. ExxonMobil and Helena Chemical Company believe that the assessment of these remedial alternatives contained in the Feasibility Study is correct. The Draft RADD published by ADEQ proposes to adopt most of the remedial analysis and recommendations contained in the Feasibility Study. ExxonMobil and Helena Chemical Company agree with the Draft RADD insofar as it follows the analysis and adopts the remedial recommendations contained in the Feasibility Study. The Draft RADD published by ADEQ, however, departs in certain respects from the analysis and recommendations of the Feasibility Study. ExxonMobil and Helena Chemical Company disagree with the Draft RADD insofar as it departs from the analysis and recommendations of the Feasibility Study. In particular, the companies believe that the RADD failed to properly evaluate and apply the Risk Assessment analysis presented in the Feasibility Study.

> ***Response:*** *The Draft RADD does incorporate a significant portion of the remedies that were recommended in the FS Report.*
>
> *The most significant deviation from the FS Report was that the stabilization area was expanded in the vicinity of the former dinoseb disposal ponds. This was because Dinoseb was retained as a COC in sub-surface soil in the Draft RADD. Dinoseb in the sub-surface soil is above the "soil to groundwater protection concentration" (see table 5B of RADD) which makes it a potential pathway to groundwater. To address these elevated concentrations, the area was extended further to address dinoseb in greater concentrations than in the area outlined in the FS Report.*
>
> *ADEQ considered the risk assessment analysis presented in the AMEC FS. However, ADEQ must consider all applicable pathways for remedial alternatives. In doing so, it is determined no changes to the final RADD are warranted.*

Comment No. 2)
The Provisions of Section 11 of the Draft RADD are not relevant to remedy selection and should be deleted.

The Draft RADD focuses almost entirely on a discussion of remedial alternatives. This focus on assessing remedial alternatives as the subject matter of the Draft RADD is entirely appropriate. One section of the RADD, however, strays from the subject of assessing remedial alternatives and purports to direct certain parties to begin taking steps to implement a remedy. Specifically, Section 11 of the Draft RADD directs undefined entities referred to as the "known PRPs" to develop a schedule for implementing the remedy:

> **11. Schedule of Implementation**
>
> **To help aide [sic] in the procession of remedial activities, the known PRPs are to submit to ADEQ a schedule within sixty (60) days of finalization of the ADEQ RADD regarding this facility.** The schedule should give highest priority to implementation of the Drum Vault Removal (Remedial Alternative D1) and alluvial aquifer enhanced biodegradation (Remedial Alternative A3). Each remedy should be scheduled in a way to expedite implementation of all remedies.
>
> **The known PRPs must submit a plan annually to evaluate monitoring data from the SVE and selected groundwater remedies.** An evaluation of the overall effectiveness of contaminant removal in soils and groundwater and review of the site risks must be conducted at 5-year intervals. (Emphasis supplied.)

ExxonMobil and Helena Chemical Company believe that Section 11 should be deleted in its entirety from the RADD for several reasons. First, questions regarding who should prepare an implementation schedule and when it should be prepared have no relevance to the purpose of the RADD. Second, if Section 11 is intended as a legitimate and meaningful command to take action, it fails to comply with any of the administrative, statutory, or constitutional prerequisites for the issuance of a lawful administrative order. Third, even if it followed the procedural requirements for an administrative order, Section 11 would be impermissibly vague. It is impossible to know who ADEQ has in mind when it uses the term "known PRPs." Although a RADD is not an appropriate place to attempt to address questions of legal liability, it is important to note that the Draft RADD does not even mention most of the parties who appear to have potential liability for at least some aspect of the remedial costs contemplated by the RADD. Nor does the Draft RADD acknowledge that the Remedial Action Trust Fund itself likely has a large and perhaps majority share of the liability for the remedial costs under Ark. Code Ann. § 8-7- 513. Finally, there is nothing about the "command" contained in Section 11 that would allow a liable party to limit its efforts at implementation to the specific elements of the remedy for which the party has liability.

Stated simply, Section 11 of the Draft RADD should be deleted because it is irrelevant to the purposes of the RADD and the requirements stated in the section are impermissibly vague and unenforceable.

Response: *ADEQ is aware that there is currently no enforcement mechanism in place to prompt implementation of the RADD. The Schedule of Implementation is vague because the legal document which will enforce the final RADD is not in place at this time. The limits of liability will be established through a separate legal action. The final RADD has been changed to state "… the PRP's are to submit to ADEQ a schedule within sixty (60) days of notice to ADEQ that RADD activities are to begin."*

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Comment No. 3)
The Draft RADD should be revised to make it clear that ADEQ's publication of the "Final RADD" and any related response to public comments do not constitute an administrative decision that is subject to immediate appeal.

The Notice and Fact Sheet that ADEQ published with the Draft RADD announces a 30 day period for the submission of public comments, sets a date for a formal public hearing, and identifies a set of documents that "comprise the administrative record" for the RADD. The Fact Sheet also states that:

> Submitting written comments to ADEQ or making oral statements on the record at any formal public hearing on the RADD provides individuals with legal standing to appeal a final Department decision. Only parties with legal standing may appeal a decision.

ExxonMobil and Helena Chemical Company agree that publishing the Draft RADD, establishing a publicly available "administrative record" of relevant documents, holding a public hearing, and inviting public comments are all appropriate steps to take in order to encourage and facilitate public participation in the remedy selection process. These steps are good public policy; and they help assure continued consistency with the public participation provisions of the National Contingency Plan. Taking steps to encourage public participation, however, does not make ADEQ's decision on the RADD an appealable administrative action. ExxonMobil and Helena Chemical Company are not aware of any instance in which a RADD issued by ADEQ has been appealed; and the companies are not aware of any statutory provision or administrative rule that would allow or require interested parties to pursue an immediate appeal from a Department decision to issue a "final RADD."

The language quoted above from the Notice and Fact Sheet published with the draft RADD contains language about standing to appeal a RADD, but that language appears to have been copied from standard form language used in the notices that the Department publishes when it issues draft permits for public comment. Indeed, the legal limitation on standing to appeal that is discussed in the language quoted above applies only to third party appeals of permitting decisions. *See* Ark. Code Ann. § 8-4-205(b); APCEC Regulation No. 8, Reg. 8.214. It is clear that the final RADD will not constitute a permit, and its issuance will not constitute a permitting decision. *See* APCEC Regulation No. 8, Reg. 8.103 (AA) & (BB) (definitions of "permit" and "permitting decision").

ExxonMobil and Helena Chemical respectfully submit that the "final RADD" and the response to comments that accompanies the "final RADD" should state clearly whether ADEQ views the issuance of the final RADD as an appealable administrative action. Unless this question is clarified in unequivocal terms, parties with interest in the matter may feel that they have no choice but to appeal the issuance of the "final RADD" in order to preserve their opportunity to resolve any potential differences with the Department regarding the RADD. ExxonMobil and Helena Chemical believe that those differences are more appropriately resolved when ADEQ seeks to order a party to implement an element of the remedy selected in the RADD, or at the time ADEQ seeks to recover costs that the Department has expended from the Remedial Action Trust Fund to implement some element of the remedy selected at the RADD. At that time a party's concerns about the relevant provisions of the RADD would be concrete rather than hypothetical, and ripe for either negotiation or adjudication.

> ***Response:*** *ADEQ agrees that the fact sheet erred when it stated that merely submitting comments to ADEQ regarding the RADD provided individuals with legal standing to appeal the decision. ADEQ does believe that a RADD is a decision of the Director that may be reviewed by the Arkansas Pollution Control & Ecology Commission pursuant to APC & E Commission Regulation 8.601 (H), 8.603(B)(9) and 8.603(C)(1)(f). The regulation provides standing to individuals who the Commission determines are injured in his or her person, business, or property. Absent such a determination by the Commission a party would lack standing to request a review of the RADD.*

Deleted: *ADEQ's stance on who may appeal the final RADD is also documented in this response to comments under Section F: DECLARATIONS.*

Comments received from Letter on behalf of Harcros/Quapaw dated March 24, 2010

Please accept these comments to the Cedar Chemical Corporation draft Remedial Action Decision Document ("RADD") submitted today on behalf of Harcros Chemicals Inc. ("Harcros") and its wholly owned subsidiary, Quapaw Products, LLC ("Quapaw"). As you know, Harcros, through Quapaw desires to redevelop the Cedar Chemical Corporation Helena-West Helena facility ("the Facility").

Harcros believes that redevelopment of the facility is the highest and best use of the Facility. As the State of Arkansas has recognized, through Arkansas' Five-Year Delta Development Plan, the Arkansas Economic Development Commission's designation of Phillips County as a Tier 4 location of economic development, the need for development in Phillips County is among the highest in all of Arkansas. To promote local overall development, the citizens of Phillips County created the Delta Bridge Project. Part of the Delta Bridge Project includes an economic development component whose mission is to:

> Create new quality jobs and career opportunities for Phillips County citizens by working with elected officials, business leaders, Port and Airport representatives, State economic development representatives, the State Highway commission, and tourist industry representatives to improve the business development infrastructure, strengthen and expand existing businesses, attract new businesses, promote local entrepreneurship, and identify local and regional needs that can be converted into business opportunities.

The redevelopment of the Facility meets the goals of the State and local community. The Facility has historically produced agrichemicals, while Quapaw doesn't intend to redevelop the Facility in this fashion; the workforce that produced agrichemicals can produce the chemicals that Quapaw may manufacture there. Additionally, Quapaw, through its strategic partner, Delta Specialty Wood Products, will utilize bio-based waxes in its fuel log production. These projects can be accommodated at the Facility and benefit from the existing transportation services in Phillips County. This opportunity will take advantage of the Port of Helena, the third largest port on the Mississippi River.

Harcros would point out that the RADD decision making process is all based upon no reuse of the Facility. While ADEQ directed AMEC, the environmental consultant to come of the known PRPs, to leave certain buildings for potential reuse, that reuse would only involve the Large Warehouse and office buildings. The ADEQ imposed requirement is not scientific or technical in nature. In fact, the removal of the laboratory building to the north edge of the Facility, is not required by the state reason for the demolition in the RADD. The demolition is not considered protective of human health and the environment by ADEQ in the RADD. Beyond demolition, the RADD is also based upon not having specific controls in place to eliminate, limit or control exposures to industrial workers. The RADD makes assumptions related to ingestion of soils and groundwater which are clearly not applicable in an industrial setting.

Despite the apparent technical issues not considered in the RADD, the industrial reuse of the Facility provides numerous benefits, both economic and environmental. The most readily apparent benefit directly to the State is the assumption by Quapaw of site security. Currently ADEQ, through funding provided by certain PRPs, provides for 24-hour guard service. Quapaw, upon assumption of the Facility, would provide the same site security.

In addition to the guard service, Quapaw would also conduct operations at the site and have vested interested in protecting its property. Quapaw will also conduct maintenance activities that will ensure the existing plant facility doesn't degrade. The mere presence of employees will control, if not eliminate, the attractive nuisance factor the Facility currently poses.
The industrial reuse of the facility changes the technical evaluation as well. In particular, the risk evaluation changes significantly. Plus an industrial reuse will also impose institutional and engineering controls that are not considered by the RADD.

Harcros/Quapaw would appreciate additional discussion of the RADD and its proposed redevelopment of the Facility. The redevelopment is clearly needed in Helena-West Helena. The proposed redevelopment can be accomplished without adverse impact to the environment. The RADD, as proposed, will not be accomplished in a timely fashion. By ADEQ's own estimates, several years are likely to pass before <u>any</u> effort required under the RADD will be undertaken. ADEQ itself, under the terms of the Remedial Action Trust Fund Act, cannot undertake the remediation because of the funding requirements. Similarly, if the Facility was referred to the U.S. Environmental Protection Agency the remediation is very unlikely to occur any sooner. The Quapaw redevelopment will <u>immediately</u> bring about certain changes at the Facility that will control environmental risk.

As Harcros and ADEQ continue to work together to redevelop the Facility, Harcros believes it is appropriate to make decisions based upon the highest and best use of the Facility and in consideration of the technical and economic benefits that redevelopment brings. The highest and best use, i.e. full redevelopment, can be accomplished.

Harcros appreciate the opportunity to comment upon the proposed RADD. The public comment process is clearly valuable to address the issues apparent to interested parties that may not be known or well understood by ADEQ. Harcros hopes that its comments help to formulate a RADD that is best for the Facility and the community. Of course, Harcros is always available to meet and discuss these issues with ADEQ.

> ***Response:*** *The RADD was developed with the presumption that the site would remain abandoned. The RADD can not be written with specific buildings targeted to remain in place without an established <u>redevelopment</u> agreement in place. ADEQ will to continue to work with potential site redevelopers to see that the site can successfully be reutilized in a manner that will be protective of human health and the environment. Therefore, no change to the final RADD is warranted <u>unless a purchase/lease agreement is reached</u>.*

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Allen Gates' public hearing transcription (verbal comment) on behalf of Council Representing Helena Chemical Company which took place March 25, 2010:

"Thank you Clyde, and I want to thank the Director and Deputy Director and Tammie for coming and making the presentation; they've done a lot of work on this site.. and um..we appreciate it

I'm here tonight on behalf of Helena Chemical Company, Helena is one of two companies that prepared all these studies at quite a bit of an extent." And we will be submitting some comments, written comments, on the substance of the RADD, but the thing I wanted to address tonight, is just one kinda rightful shot…..to the idea of the reuse of the site and the idea that proposals are around. Um.. there has been some suggestion that either the companies who have done the work to date the studies for other companies opposed that the plans to reuse the site, and that's just not the case." Specifically, we had a meeting with the representatives of Harcoss/Quapaw last week, the first time we had heard of the renewed activities, and they described the concept they have currently for reuse and we number 1 strongly support getting reuse of the site as soon as possible; and number 2 we support the proposal as we understand it, that was described to us and is currently on the table and being discussed if the Department or anyone else is thinking that somehow a proposal will stumble because of opposition from the companies who have done the studies or who might be looked to about doing additional work I can tell ya on behalf of Helena Chemical we support the idea of reuse and we support what is on the table and I'd like to make clear that we support that because it will save money, it will save money for the state, it will save money for those other companies that now have a turn to step up to the plate, it'll save money to the state RATFA. As we understand it, the proposal will be consistent with the RADD but the bigger concern I have what's good for the environment not only will save money having an operator on site, providing site security, storm water, the usual business facilities of an operating site that is maintained is better for the environment and so we hope that will be looked at, and finally the thing I would like to express a concern about tonight specifically and Teresa, Ryan, Tammie, and Clyde I'd like you guys to take home and think about, is if you can change the RADD after the fact to accommodate a plan let me strongly suggest supporting that you think about the plan that is before you from Harcross right now… because as I understand it that business opportunity is time sensitive, all business opportunities are and we would hate to have you leave tonight well we'll get the RADD adopted and then we'll go back and talk to them if in fact that might lose the opportunity we hope that you will continue to work hard and seeing whether there is ground to meet that you can with Harcross/Quapaw and if you can to do it and do it if necessary before the RADD or at least find the commitments and principle that will work less this opportunity slip away. And again I can't speak to the discussions I've not been a party to any of them but I listened last week the presentation, I got very concerned that the engine in getting this site back in use might be lost if the RADD gets in front of it and becomes the object I know that's the principle job you guys have at the Department to review and approve right now but I hope you don't lose site of the fact that maybe the first priority to see if there is

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closure you can reach with an existing business opportunity. And again I can't speak for the specifics of that but I hope you won't let anything get lost in the shuffle."

……public hearing over

> ***Response:*** *ADEQ will to continue to work with potential site redevelopers to see that the site can successfully be reutilized in a manner that will be protective of human health and the environment. Therefore, no change to the final RADD is warranted unless a purchase/lease agreement is reached.*

E. FUTURE ACTIONS.

Effective with this Decision, the final Remedial Action Decision Document is incorporated into and will become a condition of a Consent Administrative Order between PRPs and the Department, as though set forth therein line for line and word for word.

F. DECLARATIONS.

ADEQ believes that the remedies proposed in this RADD, which were primarily based on remedies proposed in the Feasibility Study Report submitted by AMEC Geomatrix, are appropriate, technically feasible, reliable, and cost effective. With respect to risk management decisions made by ADEQ, this remedy is deemed acceptable, and to be protective of human health and the environment. This RADD is a decision of the Director that may be reviewed by the Arkansas Pollution Control & Ecology Commission pursuant to APC & E Commission Regulation 8.601 (H), 8.603(B)(9) and 8.603(C)(1)(f). The regulation provides standing to individuals who the Commission determines are injured in his or her person, business, or property. Absent such a determination by the Commission a party would lack standing to request a review of the RADD.

_____ _____

Clyde E. Rhodes, Jr. (Date)
Chief
Hazardous Waste Division
Arkansas Department of Environmental Quality

Enclosure:
Final RADD

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