

APPENDIX A

EVALUATION OF DATA QUALITY OBJECTIVES ATTAINMENT

Activity	Objectives	Action	Objective Attained?	Recommendations
Objective 1: Meet TNRCC Requirements for Site Closure				
Attainment of Risk Reduction Standard Number 1: Closure/Remediation to Background				
	Remove all hazardous and nonhazardous waste and waste residues and contaminated design and operating system components such as liners, leachate collection systems, and dikes from the unit or area of the unauthorized discharge. For remediation of media that have become contaminated by releases from a waste management unit or by other unauthorized discharge of hazardous or nonhazardous waste, the contaminated media must be removed or decontaminated to cleanup levels specified in this section (30 TAC 335.554(b) and (c)).	Soil gas survey results indicated that only very low levels of chlorinated VOCs related to the Well CS-16 plume were present at AOC 37. No contaminant source areas are located within AOC 37.	Yes. The Soil Gas Survey revealed no sources of VOCs, and no removal or excavation was necessary.	Site closure under RRS1.

APPENDIX A

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	<p>Determine compliance with RRS1 closure requirements by comparing to background as represented by results of analyses of samples taken from media that are unaffected by waste management or industrial activities. If the practical quantitation limit (PQL) is greater than background, then the PQL rather than background shall be used as the cleanup level provided that the person satisfactorily demonstrates to the executive director that lower levels of quantitation of a contaminant are not possible (30 TAC 335.554(d)).</p>	<p>Soil gas survey results indicated that low levels of chlorinated VOCs related to Well CS-16 were present at AOC 37, but there was no source. There are no regulatory criteria for soil gas concentrations, and the very low concentrations detected in soil gas at AOC 37 do not indicate a source within the AOC 37 boundary. Therefore no soil samples were taken. AOC 37 was only considered for further investigation due to the close proximity to Well CS-16.</p>	<p>Yes. The Soil Gas Survey revealed no sources of VOCs, and no removal or excavation was necessary.</p>	<p>Site closure under RRS1.</p>
	<p>Attainment of cleanup levels shall be demonstrated by collection and analysis of samples from the media of concern (30 TAC 335.554(e)).</p>	<p>No samples were taken after the findings of the Soil Gas Survey.</p>	<p>Yes. The site does not contain waste or waste residue.</p>	<p>Site closure under RRS1.</p>

APPENDIX A

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Objective 2: Meet Requirements of 3008(h) Order for RFI				
RFI Workplan Requirements				
Field Sampling <i>(Detailed listing of methods and procedures are provided in project plans which are incorporated by reference).</i>	Conduct field sampling in accordance with procedures defined in the project work plan, SAP, QAPP, and HSP.	The Soil Gas Survey results did not detect a source of VOC contamination, and therefore no samples were necessary.	NA	NA
Facility Investigation				
Characterization of Environmental Setting - Hydrogeology (B.3.A.1)	Evaluate hydrogeologic conditions at the site.	Shallow groundwater was not encountered during the soil gas survey at the site. Groundwater of the Trinity Aquifer is being addressed through the Groundwater Investigation.	NA	NA
Characterization of Environmental Setting- Soils (B.3.A.2)	Characterize soils in accordance with USCS soil classification system (B.3.A.2(a)).	Soil types at the site are based on the SCS Bexar County Soil Survey (USDA, 1991). The soil types present at AOC 37 is the Trinity and Frio soil type, the Brackett-Tarrant Association, the Krum Complex, the Lewisville silty clay, and the Tarrant Association.	Yes.	NA
	Determine soil pH (B.3.A.2(e)).	Analysis of the soil types was not performed at AOC 37 due to the lack of VOC sources.	NA	NA
	Determine moisture content (B.3.A.2(g)).	The moisture content was not analyzed since no soil samples were taken.	NA	NA

APPENDIX A

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Characterization of Environmental Setting – Surface Water and Sediment (B.3.A.3)	Characterize marshes, creeks, wetland areas, or ditches at the site.	A tributary of Salado Creek, an intermittent creek, runs down the middle of AOC 66, just west of AOC 37. Although no samples were collected in the dry creek bed, no sampling is considered necessary based on the results of the soil gas survey.	Yes.	NA
Source Characterization (B.3.B)	Identify the source area (B.3.B.1).	The soil gas survey did not locate a source.	NA	NA
	Identify the location of the unit/disposal area (B.3.B.2(a)).	There is no history of waste storage or disposal at AOC 37.	NA	NA
	Identify the type of unit/disposal area (B.3.B.2(b)).	There is no history of waste storage or disposal at AOC 37.	NA	NA
	Identify design features (B.3.A.2(c)).	Information regarding design features was obtained during the Environmental Assessment (ES, 1992 and through visual observation during the field investigation.	Yes.	NA
	Identification of past and present operating practices, period of operation, age of unit/disposal area, and method used to close the unit/disposal area (B.3.B.2(d), (e), (f), and (h)).	All known information regarding these items is provided in Section 1.1 and in the current conditions report. This information is from the records review, interviews, and visual observations.	To the extent possible with data available.	NA
	Determine general physical conditions of the site (B.3.B.2(g))	The general physical condition of the site was determined during the field investigation. This information is presented in Section 1 and in the Current Conditions report.	Yes.	NA

APPENDIX A

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	Identify waste characteristics, including type of waste placed in the unit, physical and chemical characteristics of the wastes, and migration and dispersal characteristics of the waste (B.3.B.3).	There is no history of waste storage or disposal at AOC 37.	NA	NA
Contamination Characterization – Groundwater (B.3.C.1)	Characterize the vertical and horizontal extent of groundwater contamination.	Shallow groundwater was not encountered during drilling at the site. Groundwater of the Trinity Aquifer is being addressed through the Groundwater Investigation.	NA	NA
Contamination Characterization – Soil (B.3.C.2)	Determine vertical and horizontal extent of contamination (B.3.C.2(a)).	Soil gas surveys were performed at CSSA in 1999 in an effort to identify possible source areas for the chlorinated hydrocarbon contamination present in groundwater at well CS-16.	Yes.	NA
	Describe soil properties (B.3.C.2(c)).	See “Characterization of Environmental Setting – Soils” above.	Yes.	NA
	Identify the direction of contaminant movement (B.3.C.2(d)).	No actions taken based on low contaminant levels detected.	NA	NA
	Extrapolate future contaminant movement (B.3.C.2(e)).	No actions taken based on low contaminant levels detected.	NA	NA

APPENDIX A

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	Implement a soil boring investigation to determine the extent of soil contamination. Soil gas monitoring will be performed during drilling of all borings. Laboratory analysis of borings for contaminants of potential concern will be performed on soils at depths where either visual contamination is evident, or soil gas concentrations indicate contamination. All boreholes shall be properly abandoned.	Due to the lack of source and also the low contaminant levels detected, no soil boring investigation is necessary.	NA	NA
	Prepare a map of all areas included in the investigation (B.3.C.2(i)).	Figures included in this report show all areas included in the investigation.	Yes.	NA
	All reporting limits should be below regulatory criteria.	RLs were approved by TNRCC on October 5, 1999. RLs are considered RRS1 standards for all analytes except metals. The background values from the Second Revision to the Evaluation of Background Metals Concentrations in Soils and Bedrock (Parsons, February 2002) were used as RRS1 comparison criteria for metals.	Yes.	NA
	Perform all analyses in accordance with the AFCEE QAPP.	No analyses were performed, as no samples were taken.	NA	NA
		No analyses were performed, as no samples were taken.	NA.	NA

APPENDIX A

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Contaminant Characterization – Sediment and Surface Water (B.3.C.3)	Conduct a surface water and sediment investigation to characterize contamination resulting from releases at the facility.	A tributary of Salado Creek runs through AOC 66, just west of AOC 66. In the vicinity of CSSA, Salado Creek and its tributaries only contain water during and shortly after heavy precipitation. Therefore, surface water was not sampled as part of the AOC 37 investigation. Sampling of sediments in association with the AOC 37 investigation is not warranted.	Yes.	NA
Potential Receptors (B.3.D).	Collect the information necessary to describe the human populations and environmental systems that are susceptible to contaminant exposure from the Facility.	Information regarding receptors is provided in the Risk Assessment Technical Approach Document (Volume 1-6). In addition, the Well Research Report identifies private groundwater users within 0.25-mile and public water suppliers within 0.5-mile of CSSA.	Yes.	NA