

APPENDIX A

EVALUATION OF DATA QUALITY OBJECTIVES ATTAINMENT

Activity	Objectives	Action	Objective Attained?	Recommendations
Objective 1: Meet TCEQ 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-MW16 plume were present at AOC-41. No contaminant source areas are located within AOC-41.	Yes. Soil gas survey results revealed no sources for VOC contamination. No removal or excavation was necessary.	No Further Action (NFA) closure.

APPENDIX A

Activity	Objectives	Action	Objective Attained?	Recommendations
	<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-41, but there was no source area present within the site. There are no regulatory criteria for soil gas concentrations; therefore, no soil samples were taken. AOC-41 was only considered for further investigation due to the close proximity to Well CS-MW16.</p>	<p>Yes. Soil gas survey results revealed no VOC source areas within AOC-41. No removal or excavation was necessary.</p>	<p>No Further Action (NFA) closure.</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 soil gas survey findings.</p>	<p>Yes. The site does not contain waste or waste residue.</p>	<p>No Further Action (NFA) closure.</p>

APPENDIX A

Activity	Objectives	Action	Objective Attained?	Recommendations
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.	All field sampling was conducted in accordance with applicable project procedures.	Yes.	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 or geophysical investigation 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 single soil type present at AOC 41 is Krum Complex.	Yes.	NA
	Determine soil pH (B.3.A.2(e)).	The pH of each of the soil types evaluated as part of the background metals concentration study was determined through laboratory analysis. According to those analyses, the pH of Krum Complex soils is 7.87.	Yes.	NA
	Determine moisture content (B.3.A.2(g)).	No soil samples were collected at the site.	NA	NA

APPENDIX A

Activity	Objectives	Action	Objective Attained?	Recommendations
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 to the north and west of AOC-41. 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 any contaminant source areas within AOC-41.	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-41.	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-41.	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 1.2. 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 1.2.	Yes.	NA

APPENDIX A

Activity	Objectives	Action	Objective Attained?	Recommendations
	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-41.	NA	NA
Contamination Characterization – Groundwater (B.3.C.1)	Characterize the vertical and horizontal extent of groundwater contamination.	Shallow groundwater was not encountered during investigations 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-MW16.	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

Activity	Objectives	Action	Objective Attained?	Recommendations
	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 any contaminant source areas and low contaminant levels, no soil boring investigation is necessary at AOC-41.	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

Activity	Objectives	Action	Objective Attained?	Recommendations
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 north and west of AOC-41. 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-41 investigation. Sampling of sediments in association with the AOC-41 investigation is not warranted.	NA	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