

## APPENDIX D

### EVALUATION OF DATA QUALITY OBJECTIVES ATTAINMENT

Activity	Objectives	Action	Objective Attained?	Recommendations
<b>Objective 1: Meet TNRCC Requirements for Site Closure</b>				
<b>Attainment of Risk Reduction Standard Number 1: Closure/Remediation to Background</b>				
<b>Attainment of Risk Reduction Standard 1</b>	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)).	Excavation and disposal of the waste and waste residue has been performed. Confirmation sampling has shown all waste residue was removed.	Yes. Waste has been removed from site.	Site closure under RRS1.
	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)).	Contaminant concentrations were compared to revised background levels (Parsons, February 2002) or RLs, which are equivalent to PQLs.	Yes. Confirmation samples from the site excavation showed contaminant levels below background.	Site closure under RRS1.

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	Attainment of cleanup levels shall be demonstrated by collection and analysis of samples from the media of concern (30 TAC 335.554(e)).	Collected confirmation samples after excavation activities.	Yes. Samples were below background.	Site closure under RRS1.
<b>Objective 2: Meet Requirements of 3008(h) Order for RFI</b>				
<b>RFI Workplan Requirements</b>				
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 sampling was conducted in accordance with the procedures described in the project plans.	Yes.	NA
<b>Facility Investigation</b>				
Characterization of Environmental Setting - Hydrogeology (B.3.A.1)	Evaluate hydrogeologic conditions at the site.	Shallow groundwater was not encountered during drilling 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) and are described in Section 1.3.	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 Tarrant Association (undulating) soils is 8.08.	Yes.	NA
	Determine moisture content (B.3.A.2(g)).	The moisture content of each sample was analyzed. Moisture content values are provided in laboratory analytical packages.	Yes.	NA

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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.	No marshes, creeks, wetland areas, or ditches are present at the site.	Yes.	NA
Source Characterization (B.3.B)	Identify the source area (B.3.B.1).	A description of the source area is provided in Section 1.1.2.2 of the RFI Report.	Yes. The only waste found during excavation was moderate to small amounts of scrap metal.	NA
	Identify the location of the unit/disposal area (B.3.B.2(a)).	In 1999, points along the boundary of each site were surveyed with a Rockwell Plugger GPS unit (estimated accuracy of ±25 feet). The points were identified by the CSSA Environmental Coordinator. The boundary of the site was established during field investigation, as shown on the figures.	Yes. Although the accuracy of the boundary survey of the site is estimated to have an approximate error of 25 feet, this accuracy is sufficient for closure under RRS1 or TRRP Tier 1.	NA
	Identify the type of unit/disposal area (B.3.B.2(b)).	The type of unit/disposal area was identified in the Environmental Assessment (ES, 1992) and by visual observation of waste in the field.	Partially. Waste was observed on the ground surface during the Environmental Assessment, but only small amounts of solid waste (banding material) were found during excavation.	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. All available information regarding the design of the disposal site is provided in Section 1.1.2.1 of the RFI Report.	See above.	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 1.1.2.1 of the RFI Report. This information is from the Environmental Assessment, records review, interviews, and visual observations.	To the extent possible with data available.	NA

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	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 1.1.2.3 of the RFI Report.	Yes.	NA
	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).	Records regarding historic waste disposal practices at CSSA are very limited. All known information, derived from the Environmental Assessment, records review, interviews, and visual observations at the site is provided in Section 1.3 of the RFI Report.	Yes, to the extent possible with the data available.	NA
Contamination Characterization – Soil (B.3.C.2)	Determine vertical and horizontal extent of contamination (B.3.C.2(a)).	Surface and subsurface samples were collected following excavation. Surface and subsurface samples were below RRS1 closure standards.	Yes.	NA
	Identify the direction of contaminant movement (B.3.C.2(d)).	No actions taken due to limited amount of contamination.	NA	NA
	Extrapolate future contaminant movement (B.3.C.2(e)).	No actions taken due to limited amount of contamination.	NA	NA
	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.	Surface and subsurface samples were collected following excavation. Surface and subsurface samples were below RRS1 closure standards.	Yes.	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

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	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. Values from the Second Revision to the Evaluation of Background Metals Concentration in Soils and Bedrock (Parsons, February 2002) were used as RRS1 comparison criteria for metals.	Yes.	Background metals concentrations were approved by TCEQ in April 2002.
	Perform all analyses in accordance with the AFCEE QAPP.	All analyses were performed in accordance with the AFCEE QAPP and approved variances.	Yes.	NA
		All data flagged with “U,” “F,” “M,” and “J” are considered usable for site characterization purposes.	Yes. “M” flagged data are also considered usable. The matrix interference is minimal and does not significantly affect the sample results.	NA
		All data flagged with “R” are considered unusable.	Yes.	NA
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.	No surface water features are present on SWMU B-23. Therefore, surface water and stream sediments were not sampled as part of the SWMU B-23 investigation.	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