APPENDIX B

DATA QUALITY OBJECTIVES

DATA QUALITY OBJECTIVE NO. 1
MEDIA OF CONCERN: AIR
BASELINE SAMPLING

STEP 1. STATE THE PROBLEM	
Collect air quality information to determine baseline concentrations on-site at Camp Minden and in off-site community locations.	
STEP 2. IDENTIFY THE DECISION	
What are the baseline concentrations of constituents and particulates in air, represented by discrete samples and air monitoring instrumentation?	
IDENTIFY THE ALTERNATIVE ACTIONS THAT MAY BE TAKEN BASED ON THE DECISIONS.	• If any constituent is detected then it will be established as the baseline concentrations on-site at Camp Minden and in off-site community locations. • If no constituents are detected then the baseline concentrations will be established at the laboratory reporting limit.
STEP 3. IDENTIFY INPUTS TO THE DECISION	
IDENTIFY THE INFORMATIONAL INPUTS NEEDED TO RESOLVE A DECISION.	• Air quality information obtained from analytical results in samples collected from air samplers and monitoring equipment supported by laboratory analytical data.
IDENTIFY THE SOURCES FOR EACH INFORMATIONAL INPUT AND LIST THE INPUTS THAT ARE OBTAINED THROUGH ENVIRONMENTAL MEASUREMENTS.	• Sampling of air at specific locations on-site (Camp Minden) and off-site community locations. See Figure 3-1 of the QASP. • Data will be obtained from samples collected as outlined in Table 3-1 and analyzed as presented in Table 4-1 of the QASP.
BASIS FOR THE CONTAMINANT SPECIFIC ACTION LEVELS.	• Air quality information will be used to establish baseline concentrations on-site at Camp Minden and in off-site community locations.
IDENTIFY POTENTIAL SAMPLING TECHNIQUES AND APPROPRIATE ANALYTICAL METHODS.	• Air monitoring and sampling procedures including laboratory analytical methods are outlined in detail in Section 3.0 and 4.0 of the QASP.
STEP 4. DEFINE THE BOUNDARIES OF THE STUDY	
DEFINE THE DOMAIN OR GEOGRAPHIC AREA WITHIN WHICH ALL DECISIONS MUST APPLY.	• The boundaries for on-site and off-site baseline air sampling and monitoring are shown on Figure 3-1.
SPECIFY THE CHARACTERISTICS THAT DEFINE THE POPULATION OF INTEREST.	• Specific on-site and off-site community locations.
DEFINE THE SCALE OF DECISION MAKING.	• The scale of the decision will be for the on-site and off-site communities represented by each sample collected from the air or monitoring data at that location.
DETERMINE THE TIME FRAME TO WHICH THE DATA APPLY.	• The baseline data will apply until the site activities are complete.
DETERMINE WHEN TO COLLECT DATA.	• Baseline air samples will be collected during the field effort scheduled for May 2015.
IDENTIFY PRACTICAL CONSTRAINTS ON DATA COLLECTION.	• Inclement weather. • Meteorological variables. • Access not attainable. • Power supply needs.

DATA QUALITY OBJECTIVE NO. 1
MEDIA OF CONCERN: AIR
BASELINE SAMPLING

STEP 5. DEVELOP A DECISION RULE	
SPECIFY THE PARAMETER THAT CHARACTERIZES THE POPULATION OF INTEREST.	• The monitoring data and sample concentrations at each sample location on-site at Camp Minden and in off-site community locations.
SPECIFY THE ACTION LEVEL FOR THE DECISION.	• Air quality information will be collected to establish baseline concentrations on-site at Camp Minden and in off-site community locations.
DEVELOP A DECISION RULE	• If any result in an air sample is identified then the analytical data for the air represented by that sample will be used to establish baseline concentrations for the site. • If no result is identified in an air sample then the baseline concentration for the air represented by that sample will be defined by the laboratory reporting limit per Section 4 in the QASP.
STEP 6. SPECIFY LIMITS ON DECISION	
DETERMINE THE POSSIBLE RANGE OF THE PARAMETER OF INTEREST.	• Contaminant concentrations may range from 0 $\mu g/m^3$ and 0 particulates to more than the laboratory reporting limit. • Baseline concentrations and subsequent laboratory reporting limits are defined in Section 4 in the QASP.
STEP 7. OPTIMIZE THE DESIGN	
REVIEW THE DQOs.	The sample size was based on air sampling locations on-site and in off-site community locations.

DEVELOP GENERAL SAMPLING AND ANALYSIS DESIGN.

The field team will collect baseline air samples and air monitoring data from established locations on the Camp Minden site and in the surrounding community. Analytical and monitoring data will be used to determine the baseline concentrations of constituents and establish engineering controls for proposed future site activities. The air samples will be collected as outlined in Table 3-1 and analyzed for constituents listed in Table 4-1 of the QASP. On-site continuous meteorological data will be collected during the baseline field activities. QA will be conducted to demonstrate the validity of a baseline concentration established from data. Air matrix QA/QC samples will be collected as outlined in Section 3 of the QASP. Field QC for air monitoring is also presented in Section 3 of the QASP.

DATA QUALITY OBJECTIVE NO. 2
MEDIA OF CONCERN: SOIL
BASELINE SAMPLING

STEP 1. STATE THE PROBLEM	
Collect soil quality information to determine baseline concentrations on-site at Camp Minden and in off-site community locations.	
STEP 2. IDENTIFY THE DECISION	
What are the baseline concentrations of constituents in soil, represented by discrete samples?	
IDENTIFY THE ALTERNATIVE ACTIONS THAT MAY BE TAKEN BASED ON THE DECISIONS.	• If any constituent is detected then it will be established as the baseline concentrations on-site at Camp Minden and in off-site community locations. • If no constituents are detected then the baseline concentrations will be established at the laboratory reporting limit for baseline concentrations on-site at Camp Minden and in off-site community locations.
STEP 3. IDENTIFY INPUTS TO THE DECISION	
IDENTIFY THE INFORMATIONAL INPUTS NEEDED TO RESOLVE A DECISION.	• Baseline soil concentrations collected from on-site and off-site soil sample locations.
IDENTIFY THE SOURCES FOR EACH INFORMATIONAL INPUT AND LIST THE INPUTS THAT ARE OBTAINED THROUGH ENVIRONMENTAL MEASUREMENTS.	• Sampling of soil at specific locations on-site (Camp Minden) and off-site community locations. See Figure 3-1 of the QASP. • Analytical results from sampling parameters listed in Section 4 of the QASP.
BASIS FOR THE CONTAMINANT SPECIFIC ACTION LEVELS.	• Soil analytical data will be used to establish baseline concentrations on-site at Camp Minden and in off-site community locations.
IDENTIFY POTENTIAL SAMPLING TECHNIQUES AND APPROPRIATE ANALYTICAL METHODS.	• Grab samples at the surface from on-site and off-site locations as shown in Figure 3-1 and outlined in Section 3 of the QASP. • See analyses listed in Section 4 of the QASP.
STEP 4. DEFINE THE BOUNDARIES OF THE STUDY	
DEFINE THE DOMAIN OR GEOGRAPHIC AREA WITHIN WHICH ALL DECISIONS MUST APPLY.	• The sample locations and boundaries for on-site and off-site baseline soil sampling are shown in Figure 3-1.
SPECIFY THE CHARACTERISTICS THAT DEFINE THE POPULATION OF INTEREST.	• Soil sampling at specific on-site and off-site locations including the operations area and within the nearby community.
DEFINE THE SCALE OF DECISION MAKING.	• The scale of the decision will be for the on-site and off-site communities represented by each soil sample collected at that location.
DETERMINE THE TIME FRAME TO WHICH THE DATA APPLY.	• The baseline data will apply until the site activities are complete.
DETERMINE WHEN TO COLLECT DATA.	• Baseline soil samples will be collected during the field effort scheduled for May 2015.
IDENTIFY PRACTICAL CONSTRAINTS ON DATA COLLECTION.	• Inclement weather. • Access not attainable.

DATA QUALITY OBJECTIVE NO. 2
MEDIA OF CONCERN: SOIL
BASELINE SAMPLING

STEP 5. DEVELOP A DECISION RULE	
SPECIFY THE PARAMETER THAT CHARACTERIZES THE POPULATION OF INTEREST.	• Detection of constituents in soil samples on-site at Camp Minden and in off-site community locations.
SPECIFY THE ACTION LEVEL FOR THE DECISION.	• Soil quality information will be collected to establish baseline concentrations on-site at Camp Minden and in off-site community locations.
DEVELOP A DECISION RULE.	• If any result in a soil sample is identified then the analytical data for the soil represented by that sample will be used to establish baseline concentrations for the site. • If no results are identified in a soil sample then the baseline concentration for the soil represented by that sample will be defined by the laboratory reporting limit per Section 4 in the QASP.
STEP 6. SPECIFY LIMITS ON DECISION	
DETERMINE THE POSSIBLE RANGE OF THE PARAMETER OF INTEREST.	• Soil quality information collected would range from non-detect to above analytical method detection levels. • Baseline concentrations and subsequent laboratory reporting limits are defined in Section 4 in the QASP.
STEP 7. OPTIMIZE THE DESIGN	
REVIEW THE DQOs.	The sample size was based on soil sampling locations on-site and in off-site community locations.
DEVELOP GENERAL SAMPLING AND ANALYSIS DESIGN. The field team will collect soil samples from on-site at Camp Minden and off-site locations to determine baseline concentrations. Analytical data will be used to determine the baseline concentrations of constituents for proposed future site activities. The soil samples will be collected as outlined in Section 3 and analyzed for constituents listed in Section 4 of the QASP. QA will be conducted to demonstrate the validity of a baseline concentration established from analytical data. Soil matrix QA/QC samples will be collected as outlined in Section 3.	