	U.S. EPA Region 8 Response Section Sampling and Analysis Plan			
	<b>Site Name</b>	Valley Drive Abandoned Slurry	<b>SSID</b>	B8D5
	<b>City, County, State</b>	Kalispell, County, MT	<b>Response Site</b>	<a href="https://response.epa.gov/ValleyDriveAbandonedSlurry">https://response.epa.gov/ValleyDriveAbandonedSlurry</a>
	<b>On-Scene Coordinator</b>	Paul Peronard	<b>Contract TO/TD</b>	2071-2207-06
	<b>Create Date</b>	9/23/2022	<b>Revised Date</b>	N/A
	<b>Response Type</b>	<input type="checkbox"/> OPA <input checked="" type="checkbox"/> CERCLA <input type="checkbox"/> Stafford <input type="checkbox"/> Other: [EXPLAIN] <input type="checkbox"/> ER <input checked="" type="checkbox"/> RSE <input type="checkbox"/> TCRA <input type="checkbox"/> NTCR <input type="checkbox"/> Other:		
	The sampling and analysis plan (SAP) is implemented under the Region 8 Response Section Programmatic Quality Assurance Project Plan. The SAP will cover key components and supplemental information may be found in other site documentation, such as the site-specific data management plan, contracting documentation and others. For programmatic documentation, please refer to <a href="https://response.epa.gov/RECORDS">Response.epa.gov/RECORDS</a> , site-specific response site, or ask the On-Scene Coordinator for more information.			

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## 1. SAP Approvals and Project Team

SAP Approvals Table		
Title	Name	Signature & Date
USEPA DAO (ON-SCENE COORDINATOR)	Paul Peronard	<i>Paul Peronard</i> 10/5/2022
PROJECT QUALITY ASSURANCE OFFICER	Rob Tisdale	<i>Rob Tisdale</i> 10/4/2022
START PROJECT MANAGER	Madison Ericson	<i>Madison H. Ericson</i> 10/4/2022

## 2. Project Management and Background

### 2.1. Project Task and Organization

Organization	Title	Name & Contact	SAP Recipient
USEPA	OSC	Paul Peronard (Peronard.Paul@epa.gov)	<input checked="" type="checkbox"/>
	OSC	Marty McComb (McComb.Martin@epa.gov)	<input checked="" type="checkbox"/>
START	Tetra Tech Quality Assurance Manager / Project Quality Assurance Officer	Rob Tisdale (rob.tisdale@tetrattech.com)	<input checked="" type="checkbox"/>
	SAP Author	Madison Ericson (madison.ericson@tetrattech.com)	<input checked="" type="checkbox"/>
	Project Manager	Madison Ericson (madison.ericson@tetrattech.com)	<input checked="" type="checkbox"/>
	Field Team Lead	Madison Ericson (madison.ericson@tetrattech.com)	<input checked="" type="checkbox"/>
	Data Manager	Suddha Graves (suddha.graves@tetrattech.com)	<input checked="" type="checkbox"/>

### 2.2. Site Description

The Valley Drive Abandoned Slurry Site is located at 185 West Valley Drive, Kalispell, Montana. This Removal Action involves the cleanup and proper disposal of hydrocarbon waste and debris abandoned by a former construction company. The waste contains ethylbenzene, xylene, and numerous Polynuclear Aromatic Compounds (PAHs) including naphthalene. The Site was identified through a report by a private citizen to the National Response Center (NRC) and has been the subject of attempts by both Flathead County and the Montana Department of Environmental Quality to compel cleanup by the property owner. Conditions at the Site present a threat to public health and the environment and meet the criteria for initiating a removal action under 40 CFR § 300.415(b) of the National Contingency Plan (NCP). In July 2022, the U.S. Environmental Protection Agency (EPA) requested access to inspect and conduct cleanup activities on-site. However, this request was denied by the property owner. As a result, the EPA, via the Department of Justice (DOJ), sought a Warrant for Access through the Federal District Court for the District of Montana. The Court issued the requested warrant on September 7, 2022 and EPA mobilized to the Site on September 15, 2022. The warrant expires on November 30, 2022.

Proposed Site Schedule			
Activity	Estimated Start Date	Estimated Completion Date	Comments
SAP Submittal/Approval	8/2/2022	9/23/2022	
Mobilization	8/2/2022	TBD	START only onsite as needed
Removal Activities	9/15/2022	11/27/2022	START only onsite as needed
Demobilization	10/28/2022	TBD	START only onsite as needed
Data Validation	Upon receipt of analytical data from laboratory	10-business days upon receipt of analytical data from laboratory	

### 2.3. Site Map and Figure

Figures showing site location and site layout details are attached to this plan.

- Attachment 1 – Figure 1. Site Location
- Attachment 2 – Figure 2. Site Layout

### 2.4. Project Definition Background

#### 2.4.1. Project Problem Statement

Conditions at the Site present a threat to public health and the environment and meet the criteria for initiating a removal action under 40 CFR § 300.415(b) of the NCP.

#### 2.4.2. Quality Objectives

Incident/Project Objectives	Data Quality Objectives	Data Category				Action Number
		Screening	Screening + Confirmation	Definitive	Other/Comments	
1	Collect waste samples to assess the relative range of concentration of contaminants.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Evaluation of material stored in onsite tanks	1
2	Collect samples of soil, waste, and/or waste mixed with soil to develop waste profile for disposal requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Characterize waste material for disposal	2
3	Collect soil samples post removal to verify absence of hydrocarbons in the soil in the areas of the former solidification pits.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Removal Confirmation	3

## 2.5. Site Specific Training – PQAPP and HASP will be followed

As described under the PQAPP and the HASP.

## 3. Data Generation and Acquisition Elements

Site-specific data elements are identified below; standard practices and needs are described and outlined in the PQAPP. Any deviations will be noted below in the site narrative.

### 3.1. Sampling/Monitoring Process and Design

<input type="checkbox"/>	Random Sampling	<input type="checkbox"/>	Transect Sampling	<input type="checkbox"/>	Biased/Judgmental Sampling
<input type="checkbox"/>	Systematic Random Sampling	<input type="checkbox"/>	Search Sampling	<input type="checkbox"/>	Systematic Grid
<input checked="" type="checkbox"/>	Screening with Definitive Confirmation	<input checked="" type="checkbox"/>	Definitive Sampling	<input type="checkbox"/>	Screening w/o Definitive Confirmation
<input type="checkbox"/>	Stratified Random Sampling	<input type="checkbox"/>	Incremental Sampling	<input type="checkbox"/>	Other

Sampling Narrative: Collect waste samples from abandoned tanks to identify and assess contaminants for removal and disposal. Collection points are from visually released material on the soil and open tanks, as deemed appropriate.

Additionally, soil samples will be collected after removal actions are complete to verify the absence of hydrocarbon in the soil in the areas of the former solidification pits. Two to Four 30-point composite samples will be collected, as deemed appropriate.

All sampling location data will adhere to the SDMP and be recorded in a compliant manner.

### 3.2. Analytical Sampling Methods

Obj #	Locations	Matrix	Number of Samples	Sampling Method/SOP	Analysis	Analytical Method/SOP	Descriptor
1	Released material from open tanks	Waste, soil, and waste mixed with soil	1	Tetra Tech SOP No. 005-4, "Soil Sampling"	TAL Metals and Mercury TPH- GRO/DRO/ORO PCBs Total Halides MA- EPH	EPA Methods 6010/6020/7471 EPA Method 8015C EPA Method 8082A EPA Method 9023 3546	N/A
2	Material from inside open tanks	Waste	1	ERT PROC SOP No. 2049-20, "Investigation-Derived Waste Management"	TCLP Metals (RCRA 8) TCLP VOC TCLP SVOC Paint Filter Liquid Test MA- EPH	EPA Methods 6010/7470/1311 EPA Methods 1311/8260 EPA Methods 1311/8270 EPA Method 9095B 3546	N/A
3	Former solidification pit area(s)	Soil	2-4	Tetra Tech SOP No. 005-4, "Soil Sampling"	TPH- GRO/DRO/ORO MA- EPH	EPA Method 8015C 3546	N/A

Obj #	Analysis	Number of Containers	Field QC	Container Size and Type	Preservation	Hold Time	Additional Field Parameters Required
1	TAL Metals	1	N/A	4-oz amber glass jar	None	180 days	N/A
1	Mercury	1	N/A	4-oz amber glass jar	Store at 4 °C	28 days	N/A
1	TPH-GRO	1	N/A	4-oz amber glass jar	Store at 4 °C	14 days (extraction), 40 days (analysis)	N/A
1	TPH-ORO	1	N/A	4-oz amber glass jar	Store at 4 °C	14 days (extraction), 40 days (analysis)	N/A
1	TPH-DRO	1	N/A	4-oz amber glass jar	Store at 4 °C	14 days (extraction), 40 days (analysis)	N/A
1	Total Halides	1	N/A	4-oz amber glass jar	Store at 4 °C	14 days (extraction), 40 days (analysis)	N/A

Obj #	Analysis	Number of Containers	Field QC	Container Size and Type	Preservation	Hold Time	Additional Field Parameters Required
1	PCBs	1	N/A	4-oz amber glass jar	Store at 4 °C	1 year (extraction), 40 days (analysis)	N/A
1,2	MA-EPH	1	N/A	8-oz amber glass jar	Store at 4 °C	14 days (extraction), 40 days (analysis)	N/A
2	TCLP Metals (RCRA 8)	1	N/A	8-oz amber glass jar	None	180 days	N/A
2	TCLP VOC	1	N/A	8-oz amber glass jar	Store at 4 °C	14 days (extraction), 14 days (analysis)	N/A
2	TCLP SVOC	1	N/A	8-oz amber glass jar	Store at 4 °C	14 days (extraction), 40 days (analysis)	N/A
2	Paint Filter Liquid Test	1	N/A	4-oz amber glass jar	None	180 days	N/A

### 3.3. Monitoring/Screening Methods

Obj #	Analyte/Parameter	Type	Location	Matrix	Instrument	Monitoring Method/SOP	Action Levels	Action to be Taken
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<p>* Please reference standard/generic action levels, such as <a href="#">RMLs</a>, <a href="#">RSLs</a>, <a href="#">NIOSH</a>, <a href="#">AEGLs</a>, etc.</p> <p>If site-specific action levels exist, reference accordingly in the table and provide any supplemental documentation in the site files.</p>								

**4. Data Quality Indicators and Data Acceptability Criteria**

Analyte / Parameter	Analytical Method/SOP	Precision	Accuracy	Sensitivity/Quantitation Limits	Other Requirements
TAL Metals	6010/6020/7471	Per analytical method (lab QC stated by method requirements); per PQAPP field duplicate criteria	Per analytical method LCS/LCSD, and MS/MSD	Per analytical method (lab QC stated by method requirements)	N/A
TPH- GRO/DRO/ORO	8015C				
PCBs	8082A				
Total Halides	9023				
TCLP Metals (RCRA 8)	6010/7470/1311				
TCLP VOC	1311/8260				
TCLP SVOC	1311/8270				
Paint Filter Liquid Test	9095B				
MA- EPH	3546				

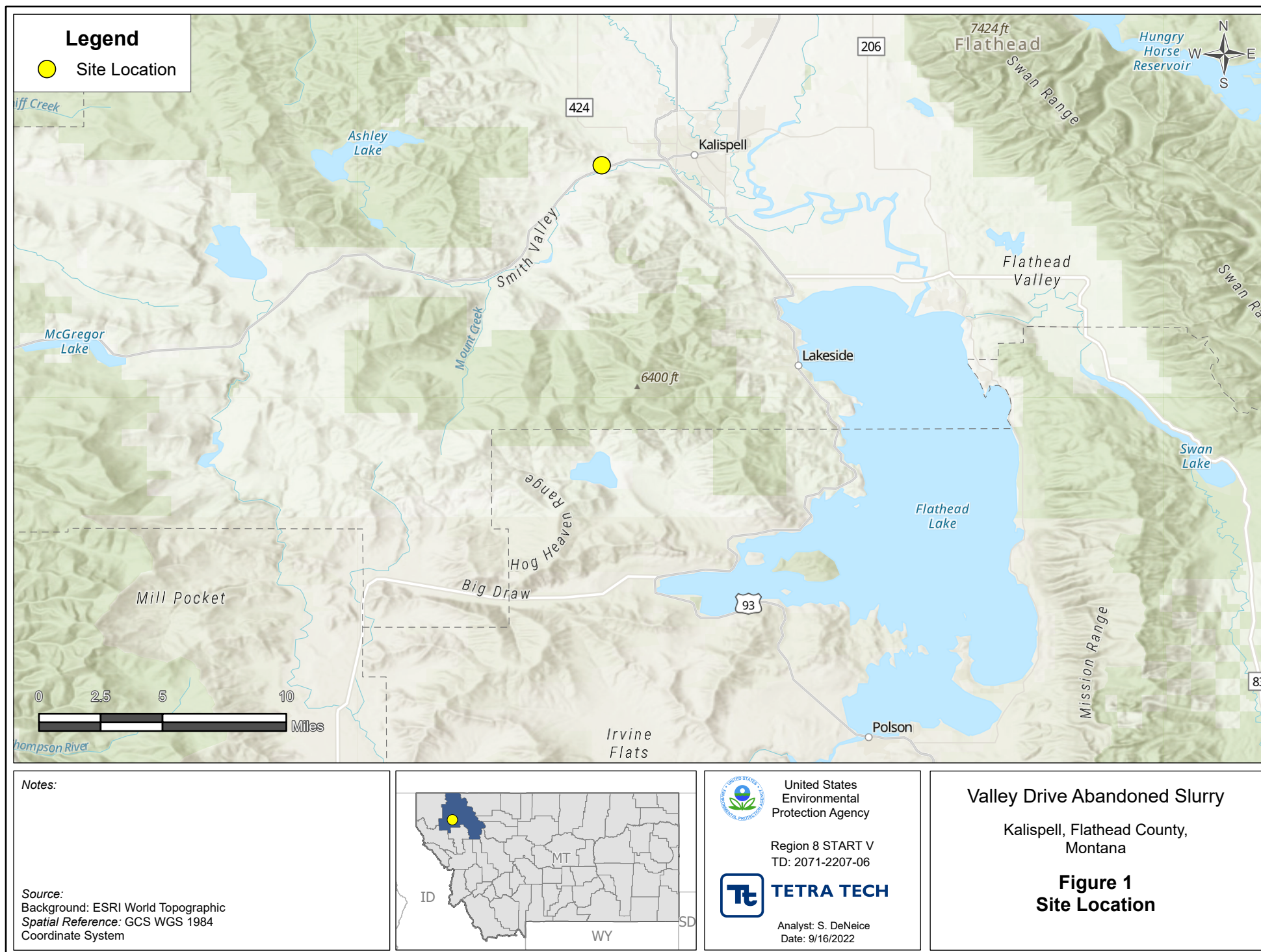
**5. Reconciliation with PQAPP**

PQAPP Section	Deviation(s)
N/A	N/A

**6. Document Revision History**

Date	Version	Author(s)	Description of Change
9/23/2022	0	Madison Ericson	Initial draft of SAP.
10/4/2022	1	Madison Ericson	Additional confirmation soil sampling added

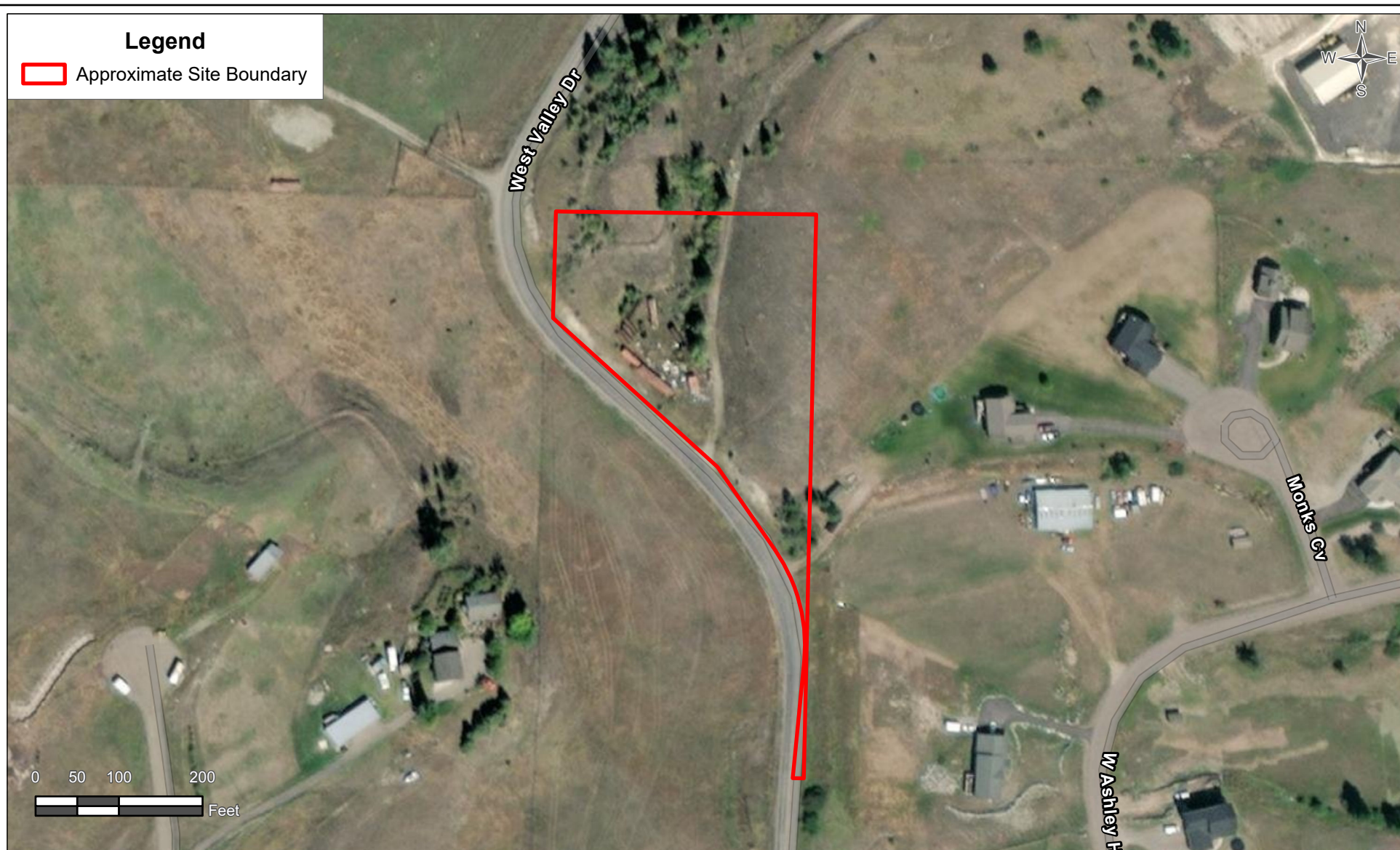






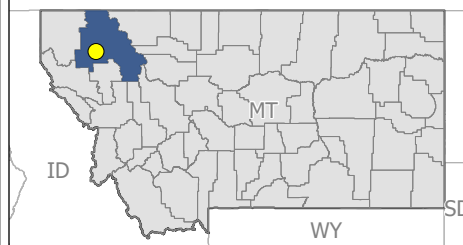
## Legend

 Approximate Site Boundary



### Notes:

Source:  
Background: ESRI World Topographic  
Spatial Reference: WGS 1984 Web Mercator Auxiliary Sphere  
Coordinate System



United States  
Environmental  
Protection Agency

Region 8 START V  
TD: 2071-2207-06



**TETRA TECH**

Analyst: S. DeNeice  
Date: 9/16/2022

## Valley Drive Abandoned Slurry

Kalispell, Flathead County,  
Montana

### Figure 2 Site Layout