

APPENDIX B

Checklist For Field Sampling and Analysis Plan

Site-Specific Investigation-Derived Waste Plan Checklist

This checklist supplements the Master IDW Plan with site-specific information. Once completed for a specific project, it provides necessary IDW information for each investigation. It is to be taken into the field with the Master IDW Plan.

Site: AFWTF

1. IDW Media: Soil cuttings
 Well development or purge water
 Decontamination residual soil and wastewater
 PPE or disposable equipment
 Other _____

2. Expected Regulatory Status: Hazardous
 Solid Waste
 Unknown
 Other Waste management activities regulated by OSHA
Hazardous standard (1910.120)

3. Site Location: Decontamination fluids and PPE will be generated at all SWMUs.

4. Nature of Contaminants Expected: Petroleum contamination
 Polycyclic aromatic hydrocarbon
 Pesticides
 Herbicides
 PCBs
 Metals
 Other - Contaminant concentrations
from previous analytical results were very low for
all of the above.

5. Volume of IDW Expected: Drums - Maximum of 6. One for decontamination
Fluids, four for drilling cuttings and one for PPE
and other disposable items.
 Cubic Yards
 Tons
 Gallons

6. Compositing Strategy for Sample Collection: No IDW sampling planned. Will base disposal decisions on analytical results from sampling.

7. IDW Storage
X_____As per Master IDW Plan _____Other_____

8. Waste Disposal
X_____As per Master IDW Plan _____Other_____

Site-Specific Quality Assurance Project Plan Checklist

This checklist supplements the Master QAPP with site-specific information. Once completed for a specific project, it provides necessary quality assurance information for each investigation. It is to be taken into the field with the Master QAPP.

Site: AFWTF

1. List sampling tasks: groundwater and subsurface soil sampling, surface soil sampling, and monitoring well installations.
2. List data quality objectives: The objective of the SWMU Investigation is to determine the need for further action at each of the SWMUs. Previous analytical data and the analytical data generated from the Investigation will be reviewed and a recommendation for no further action or additional investigation will be made based on the data.
3. Organization:

LANTDIV Navy Technical Representative	Chris Penny / LANTDIV
PREQB Federal Facilities Project Manager	Aissa Colon/ PREQB
CH2M HILL Activity Manager	John Tomik / CH2M HILL
Quality Control Senior Review	Kevin Sanders / CH2M HILL
Technical Project Manager	Marty Clasen/ CH2M HILL
Field Team Leader	Erik Isern/ CH2M HILL
4. Table of samples with analyses to be performed and associated QC samples included in the SWMU Investigation Work Plan.
5. Analytical Quantitation Limits:
X____As per Master QAPP
____Other
6. QA/QC Acceptance Criteria (e.g., precision, accuracy)
X____As per Master QAPP ____Other (attached)
7. Data reduction, validation, and reporting:
X____As per Master QAPP ____Other (attached)
8. Internal QC Procedures (field and laboratory):

X_____As per Master QAPP _____Other (attached)

9. Corrective Action:

X_____As per Master QAPP _____Other (attached)

10. Other deviations from Master QAPP - None

Site-Specific Field Sampling Plan Checklist

This checklist supplements the Master Field Sampling Plan with site-specific information. Once completed for a specific project, it provides necessary field sampling information for each investigation. It is to be taken into the field with the Master FSP.

Site: AFWTF

1. Tasks to be performed:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Geophysical surveys
<input type="checkbox"/> Soil gas surveys
<input checked="" type="checkbox"/> Surface water and sediment sampling
<input checked="" type="checkbox"/> Surface soil sampling
<input checked="" type="checkbox"/> Soil boring installation
<input checked="" type="checkbox"/> Subsurface soil sampling
<input checked="" type="checkbox"/> Monitoring well installation and development
<input type="checkbox"/> Monitoring well abandonment
<input checked="" type="checkbox"/> Groundwater sampling | <input checked="" type="checkbox"/> In-situ groundwater sampling
<input type="checkbox"/> Aquifer testing
<input checked="" type="checkbox"/> Hydrogeologic measurements
<input type="checkbox"/> Biota sampling
<input type="checkbox"/> Trenching
<input type="checkbox"/> Land surveying
<input checked="" type="checkbox"/> Investigation derived waste sampling
<input checked="" type="checkbox"/> Decontamination
<input type="checkbox"/> Other _____ |
|--|---|

2. Field measurements to be taken:

- | | |
|--|--|
| <input checked="" type="checkbox"/> temperature
<input checked="" type="checkbox"/> pH
<input checked="" type="checkbox"/> dissolved oxygen
<input checked="" type="checkbox"/> turbidity
<input checked="" type="checkbox"/> specific conductance
<input checked="" type="checkbox"/> organic vapor monitoring
<input checked="" type="checkbox"/> geophysical parameters (list):
<input checked="" type="checkbox"/> electromagnetic induction
<input type="checkbox"/> ground-penetrating radar | <input checked="" type="checkbox"/> oxidation reduction potential
<input checked="" type="checkbox"/> surveying
<input checked="" type="checkbox"/> magnetometry
<input checked="" type="checkbox"/> global positioning system
<input type="checkbox"/> soil gas parameters (list):
<input type="checkbox"/> combustible gases
<input checked="" type="checkbox"/> water-level measurements
<input type="checkbox"/> pumping rate
<input type="checkbox"/> other _____ |
|--|--|

3. Sampling program (nomenclature, etc.):

- As per Master FSP Other

4. Map of boring and sampling locations (attach to checklist): See Work Plan.

5. Table of field samples to be collected: See Investigation Work Plan.

6. Applicable SOPs or references to specific pages in Master FSP: The following SOPs from Attachment of the Master Project Plans are to be implemented.

- Shallow Soil Sampling
- General guidance for Monitoring Well Installation
- Homogenization of Soil and Sediment Samples

- VOC Sampling – Water
- Field Filtering
- Chain-of-Custody
- Packaging and Shipping Procedures
- Equipment blank and Field Blank Preparation
- Decontamination of Personnel and Equipment
- Disposal of Fluids and Solids
- Volatiles monitoring with an OVA
- Field Measurement of pH
- Field Measurement of pH and Eh
- Field Measurement of specific conductance
- Field Measurement of Dissolved Oxygen
- Field Measurement of pH, Specific conductance, turbidity, dissolved oxygen, and temperature using the Horiba®U-10 sampler
- Preserving Non-VOC Aqueous samples
- Groundwater sampling from monitoring wells
- Soil sampling for VOCs using the Encore® samples
- Soil sampling
- Soil boring drilling and abandonment
- Soil boring sampling-split spoon
- Logging of soil borings
- Water level measurements

Region II's SOP groundwater sampling procedures low stress (low flow) purging and sampling (March 16, 1998)

7. Site-specific procedures or updates to protocols established in the Master FSP:

Described in the Work Plan.

Site-Specific Health and Safety Plan

This checklist must be used in conjunction with the Master HASP. This checklist is intended for use by CH2M HILL employees only. All CH2M HILL employees performing tasks under this checklist must read and sign both this checklist and the Master HASP and agree to abide by their provisions (see EMPLOYEE SIGNOFF attached to the checklist).

Site: AFWTF

Location(s): SWMU Location Map and Individual SWMU figures are included in the Work Plan.

This document shall be maintained on site with the Master Health and Safety Plan. It will include as attachments from the Work Plan a site map and the site characterization and objectives for this site.

The procedures described in the Master Health and Safety Plan will be followed unless otherwise specified in this Site-Specific Health and Safety Plan.

1. HAZWOPER-Regulated Tasks

- | | |
|---|--|
| <input type="checkbox"/> Test pit and excavation
<input checked="" type="checkbox"/> Soil boring installation
<input checked="" type="checkbox"/> Geoprobe boring
<input checked="" type="checkbox"/> Geophysical surveys
<input type="checkbox"/> Hand augering
<input checked="" type="checkbox"/> Subsurface soil sampling
<input checked="" type="checkbox"/> Surface soil sampling
<input type="checkbox"/> Soil gas surveys
<input checked="" type="checkbox"/> Sediment sampling
<input checked="" type="checkbox"/> Monitoring well/drive point installation
<input type="checkbox"/> Monitoring well abandonment | <input checked="" type="checkbox"/> Groundwater sampling
<input type="checkbox"/> Aquifer testing
<input checked="" type="checkbox"/> Hydrologic measurements
<input checked="" type="checkbox"/> Surface water sampling
<input type="checkbox"/> Biota sampling
<input checked="" type="checkbox"/> Investigation-derived waste (drum) sampling and disposal
<input type="checkbox"/> Observation of loading of material for offsite disposal
<input type="checkbox"/> Oversight of remediation and construction
<input type="checkbox"/> Other _____ |
|---|--|

2. Hazards of Concern: (Check as many as are applicable. Refer to Section 3 of Master H&S Plan for control measures):

- | | |
|--|--|
| <input checked="" type="checkbox"/> Heat stress
<input type="checkbox"/> Cold stress
<input type="checkbox"/> Buried utilities, drums, tanks
<input type="checkbox"/> Inadequate illumination
<input checked="" type="checkbox"/> Drilling
<input type="checkbox"/> Heavy equipment
<input type="checkbox"/> Working near water
<input type="checkbox"/> Flying debris
<input type="checkbox"/> Gas cylinders
<input checked="" type="checkbox"/> Noise
<input checked="" type="checkbox"/> Slip, trip, or fall hazards
<input checked="" type="checkbox"/> Back injury | <input type="checkbox"/> Confined space entry
<input type="checkbox"/> Trenches, excavations
<input type="checkbox"/> Protruding objects
<input checked="" type="checkbox"/> Vehicle traffic
<input type="checkbox"/> Ladders, scaffolds
<input type="checkbox"/> Fire
<input type="checkbox"/> Working on water
<input type="checkbox"/> Snakes or insects
<input checked="" type="checkbox"/> Poison ivy, oak, sumac
<input checked="" type="checkbox"/> Ticks
<input type="checkbox"/> Radiological
<input type="checkbox"/> Other _____ |
|--|--|

