

BUILDING 81, BUILDING 82, SOLVENT RELEASE AREA

REMEDIAL INVESTIGATION STATUS UPDATE

September 14, 2006

Tetra Tech NUS, Inc.

Objectives of RI Field Activities

Soil Sampling- Delineates the extent of contamination in the overburden material

Surface Geophysics- Used to determine locations for bedrock wells/and locations of buried utilities

Bedrock Coring- Determines the preferred water pathways (and therefore likely areas of contamination) and placement of screened interval in a well

Borehole Geophysics- Used to determine locations for discrete interval sampling

Discrete Interval Sampling - Used to determine placement of screened interval in a well

- Groundwater Profiling – Used to determine locations of monitoring wells

Objectives of RI Field Activities

Well Development- Removes fines and makes a connection between the well and the surrounding aquifer to achieve representative groundwater samples

Groundwater Sampling- Delineates the extent of contamination in the groundwater, potential contaminant migration, and fate and transport

Hydraulic Conductivity- Evaluates groundwater movement through overburden and bedrock materials

Surface Water/Sediment- Evaluates the presence, nature, and extent of contamination

- Ecological Assessment- provides baseline assessment of the ecological resources present

Building 81- RI Field Program

Surface Geophysics (utility clearance)

Soil/Bedrock Investigation

- Surface Soil Samples
- Subsurface Soil Samples
- Bedrock Coring

■ Groundwater Investigation

- Groundwater Profiling
- Well Installation
- Well Development
- Groundwater Sampling
- Hydraulic Conductivity

Bldg 81 – Utility Locations



Bldg 81 – DPT Soil Sampling



Bldg 81 – Soil Sampling Setup



Bldg 81 – Groundwater Profiling



Bldg 81 – Groundwater Profiling



Bldg 81 – Setup for Monitoring Well Installation



Bldg 81 – Rock Core



Building 82 – RI Field Program

Surface Geophysics (utility clearance)

Soil Investigation

- Surface Soil Samples
- Subsurface Soil Samples
- Test Pits

Groundwater Investigation

- Groundwater Profiling
- Well Installation
- Well Development
- Groundwater Sampling
- Hydraulic Conductivity

■ Surface Water/Sediment Investigation

Bldg 82 – DPT Soil Boring



Bldg 82 – DPT Soil Boring in Hangar



Bldg 82 - Skid Drill Rig



Bldg 82 – Overburden Drilling



Bldg 82 – Drilling in Hangar



Bldg 82 – Screening Drilling Fluids for VOCs with a PID



Bldg 82 – Concrete Removal for Test Pit



Bldg 82 – Test Pit Excavation



Bldg 82 – Test Pit Excavation



SRA – RI Field Program

Surface Geophysics (Seismic Refraction, 2-D Resistivity & Very Low Frequency)

Soil/Bedrock Investigation

- Soil Samples
- Air Rotary Drilling (Bedrock Borings)

Groundwater Investigation

- Borehole Geophysics
- Discrete Interval Sampling
- Well Installation
- Well Development
- Groundwater Sampling
- In-Situ Hydraulic Conductivity Estimates

Surface Water/Sediment Investigation

- Ecological Assessment

SRA – Surface Geophysics



SRA – Air Rotary Drill Rig



SRA – Air Rotary Drill Rig



SRA – Difficult Rig Access



SRA – Borehole Geophysics Equipment



SRA – Borehole Geophysics Setup



SRA – Groundwater Discrete Interval Sampling



SRA – Soil Sampling-ATV Rig



SRA – Screening Soil for VOCs



SRA – Soil Sampling for VOCs



SRA – Well Development



Status of Field Programs

Geophysics completed at all 3 sites.

Soil borings and sampling completed at all 3 sites.

Monitoring well installation completed at Building 81 & SRA; Building 82 to be completed early next week.

Groundwater sampling at all 3 sites in September – October.

- Surface water/sediment sampling at Building 82 & SRA in October – November.