

Memorandum to Harlan Ainscough  
From Jeb Love *Jeb*  
Re Technical Memorandum No 1, Addendum to Final Phase 1,  
RFI/RI Workplan, Walnut Creek Priority Drainage,  
Operable Unit No 6  
Date October 22, 1992

The above document is woefully inadequate to direct sampling and analysis to assess water related conditions within the Walnut Creek drainage

#### General Comments

The document is not a monitoring or sampling plan for the Drainage

There is a dearth of existing concurrent data on sediment and water column chemistry, flow, loadings and toxicity results at base flow, (summer and winter), snow melt and storm event flows

#### Specific Comments

There is not enough substance to work with to base any further comments on the document

The Walnut Creek drainage, made up of the Industrial area, upstream area(s), OU4, OU6 and OU3 need one monitoring plan for describing physical, chemical and biological conditions of the surface water and tributary groundwaters. The Operable Unit areas can be segregated out once we have an understanding of the needs for the entire drainage, coverage and analytes. Each critical segment can be evaluated in relationship to the other without the artificial barriers. The level of resolution and complexity of models can be determined from the initial baseline assessment.

Walnut Creek drainage is a much more complex area than Woman Creek or Rock Creek. The historical data, especially in some ponds, show levels of contaminants of concern that exceed potential ARARs. The loadings to these ponds will be important, including the transport pathway and mechanism, wet and dry flow conditions, to identify and quantify source areas.

I talked to representatives at the plant to enquire of their activities in this drainage. Limited coordination in OU6 exists between the ER project manager and the Facilities Engineering Group of Defense Programs to develop and coordinate a monitoring plan. The foundation and cooperation we have developing for Woman Creek is not perfect, but it is much better established than in Walnut Creek.

Loys Parish at EPA will not be available until the week of the 26th. We will have to set up a field inspection after that. We will likely include the Industrial area in the inspection, since we will want to include the entire Walnut Creek drainage to insure we have covered everything. We can develop a plan that identifies each sub-drainage and the coverage and list of analytes, including toxicity tests, needed.

DOCUMENT CLASSIFICATION  
REVIEW WAIVER PER  
CLASSIFICATION OFFICE

Previously Approved Operable Unit 6 RFI/RI Workplan

Due to changes in funding, site-wide program etc the original RFI/RI workplan cannot be carried out as approved

Attached are my notes and questions of the EE and related media sampling for OU6 done in November of 91 As you can see they will not carry out the approved RFI/RI and could be compromising the Environmental Evaluation for OU6 and OU3

**WALNUT CREEK DRAINAGE BIOLOGICAL SAMPLING OU6 Notes, November, 1991**

Surface water, groundwater and sediment

Inorganic, organic, metals and radionuclides S&A to be coordinated concurrently with biological sampling and other programs at the site (page 9-72) WHAT ABOUT CONCURRENT FLOW MEASUREMENT?

COMMENT

The examination of exposure assessment and pathway models and coordination with site-wide and specific sampling and modeling attempts is lacking The discussion is too general The relationships among these parties is apparently lacking To select appropriate scopes of work for further examination of endpoints, magnitude, duration and frequency of occurrence of contaminants of concern requires coordination among these groups These group efforts must be integrated This coordination must be developed up-front or risk doing the effort all over again to answer question that may arise

How do you estimate the magnitude, frequency and duration of specific contaminants of concern? What uncertainties exist and to what degree?

What cause and effect relationships exist between transport and fate of contaminants of concern and biological endpoints?

What do the results of simulated reductions in levels of contaminants of concern have on biological endpoints and the aquatic community

What methods have been used to simulate these reductions? Remediation and treatment? Where and to what degree?

How has the relationship between remediation and improvement in either the level of contaminants or benefit to the aquatic community been established (quantified, estimated)?

How have decisions on appropriate methods and levels of remediation been made?

## Periphyton

Scientific name

Algal density (cell counts of each taxon)

Biomass (chlorophyll-a and phaeophytin-a concentrations)

## Macrobenthos

Scientific Name (generally to genus) Should be to species

Number of individuals in each taxon

## Fish

Scientific name

Number of individuals in each taxon

Length

Weight

(Scales collected for age class vs size, population structure and survivorship)

## Toxicity tests

Acute and chronic tests with fathead minnows and Ceriodaphnia spp

## Tissue analysis

See task 2 results when available

## Sampling Locations and Frequency

(Methods Ecology SOPs)

### Sample frequency

Brief field surveys during 1-week periods in the spring, summer, fall and winter

Field inventory sampling in May-June and July-August

Initial tox tests May-June (high flow) and September-October (low flow)

**SAMPLING WILL BE COORDINATED WITH SURFACE AND SEDIMENT SAMPLING ACTIVITIES AND NEARBY OU SAMPLING PROGRAMS PAGE 9-75**

Stations

Periphyton, Macro benthos, Fish, Toxicity testing and Tissue

SW-96  
SW-100  
SW-110  
SW-111  
SW-16  
SW-24  
SW-25  
SW-03  
SW-A1  
SW-A2  
SW-A3  
SW-A4  
SW-B1  
SW-B2  
SW-B3  
SW-B4  
SW-B5  
WN-1  
WN-2  
WN-3           no toxicity or periphyton  
WN-11  
WN-12 no toxicity or tissue  
WN-13 no tissue  
WN-21 no periphyton, fish, toxicity or tissue

All WN stations are from OU-3 draft Workplan