

START

0024102

MEETING MINUTES

Subject: Expedited Response Action Weekly Interface

TO: Distribution

BUILDING: 450 Hills

FROM: W. L. Johnson



CHAIRMAN: W. L. Johnson

Dept-Operation-Component	Area	Shift	Meeting Dates	Number Attending
Environmental Engineering	3000	Day	October 19, 1992	7

M. R. Adams	H4-55	EPA	B5-01
M. V. Berriochoa	B3-30	P. Beaver	
H. D. Downey*	L4-92	P. T. Day	
J. K. Erickson	A5-19	D. R. Einan	
W. F. Heine	B2-35	D. A. Faulk	
G. C. Henckel	H4-55	L. Gadbois	
R. E. Lerch	B2-35	P. S. Innis*	
R. G. McLeod	A5-19	D. R. Sherwood	
P. M. Pak*	A5-19		
J. K. Patterson	L4-92	Ecology	fax
J. T. Stewart	A5-20	J. Donnelly	
R. K. Stewart	A5-19	L. Goldstein	
T. M. Wintczak	L4-92	R. L. Hibbard	
R. D. Wojtasek	L4-92	D. Goswami	
EDMC	H4-22	J. Phillips*	
Field File Custodian	H4-55	D. D. Teel	
ERAG Route			
WLJ File/LB			



*Attendees

The weekly interface meetings on the expedited response actions (ERAs) was held to status the ERAs for the U.S. Department of Energy, Richland Field Office and the regulators. The meeting was conducted in accordance with the attached agenda. Actions were formally reviewed and the attached action item list was updated. Weekly reports are also attached.

All eight ERAs were discussed and their status summarized.

Attachments:

1. Agenda
2. Action Item List
3. Decisions, Agreements & Commitments
4. Expedited Response Action Weekly Report, 9/25/92
5. Expedited Response Action Weekly Report, 10/2/92
6. North Slope ERA Waste Control Plan
7. CCl₄ Vapor Emissions Calculations

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WEEKLY ERA INTERFACE AGENDA

SUBJECT: STATUS OF THE EXPEDITED RESPONSE ACTIONS

DATE: October 19, 1992

- 9 2 1 2 7 5 6 1 6 6 8
- GENERAL ISSUES
 - ERA Interface Action Item review
 - INDIVIDUAL PROJECT STATUS
 - 618-9 Burial Ground
 - o WIDs and completion letter completed
 - 200-W Carbon Tetrachloride
 - o Site characterization status
 - o Operations status
 - o Procurement (contract award has been made)
 - o Integrated demonstration activities
 - Sodium Dichromate
 - o EE/CA review cycle, ready November 1, 1992
 - Riverland
 - o Project plan (SAP) comments - EPA's comments have been included
 - o Sampling tentatively scheduled for October 27, 1992, 9:00 am
 - o GPR - no anomalies at AAA site.
 - Pickling Acid Crib
 - o SAP drafted
 - o Sampling planned for November 16, 1992
 - 618-11 Burial Ground
 - o Historical research continues
 - N-Spring
 - o Project plan submitted today - October 19, 1992
 - Wahluke Slope
 - o Sampling initiated on October 12, 1992, ten auger holes completed.
 - o Waste Control Plan approved
 - o NEPA
 - o SAP sign-off
 - OTHER ISSUE
 - D Pond
 - o Change request to be discussed at the Project Manager's Meeting on October 20, 1992.
 - SUMMARY OF ACTION ITEMS
 - SIGN-OFF ON ANY DECISIONS, AGREEMENTS, OR COMMITMENTS

EXPEDITED RESPONSE ACTION INTERFACE MEETING

-ACTION ITEMS-
October 19, 1992

ORGANIZATION

ACTION ITEM

WHC WHC will provide RL, EPA, and Ecology copies of the GPR reports for Riverland, Sodium Dichromate, and Pickling Acid ERA sites when they become available. (open) North Slope report was provided on 10/5/92.

WHC WHC to develop a draft plan for removal and storage of oil soaked soil at the grease rack. (closed) Draft plan provided at the 9/28/92 meeting and agreed to.

WHC Provide description of the best method to incorporate 618-10 into 618-11 ERA. (open)

WHC WHC will provide updated information to the WIDs database on the 618-9 Burial Ground. In addition, WHC will prepare a letter documenting the completion of activities at 618-9 and recommending a proposed method for documenting the project completion to EPA. (closed) Letter sent on 10/14/92.

EPA/Ecology/RL Assess the feasibility of a complete parallel review for the Sodium Dichromate EE/CA and provide a decision by 10/19/92.

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EXPEDITED RESPONSE ACTION INTERFACE MEETING

-DECISIONS, AGREEMENTS, & COMMITMENTS-
October 19, 1992

DECISIONS:

AGREEMENTS:

EPA and Ecology have agreed to the North Slope SAP as modified and are in ~~in~~ concurrence with the activities being conducted. The ~~the~~ modified SAP is being formally transmitted to the regulators.

COMMITMENTS:

Paul M. Link for RKS

DOE Representative

Patricia A. Harris for DENNIS A. FAULK

EPA Representative

[Signature]

ECOLOGY Representative

WJH 10/19/92

WHC Representative

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Weekly Report, Week Ending October 9, 1992
EXPEDITED RESPONSE ACTIONS
Technical and Management Contact - Wayne L. Johnson, 376-1721
Environmental Division

North Slope Expedited Response Action - Military landfill sampling plan has been approved. Sampling will be initiated October 12, 1992. The State of Washington Department of Ecology will be obtaining split samples during the investigation. Since the characterization borings will be located within a potential waste site, the holes be close with grout per state requirements.

Pickling Acid Crib Expedited Response Action - Work continues on schedule to complete the project and sampling plans.

Riverland Railroad Site Expedited Response Action - NEPA documentation for the characterization work is in the signature process at RL.

Sodium Dichromate Expedited Response Action - The rough draft of the ERA proposal was completed based on field data. The off site lab data will be incorporated immediately upon arrival.

N-Springs Expedited Response Action - WHC has provided the N-Springs ERA project plan to RL for transmittal to EPA and Ecology. Work was initiated to prepare the ERA proposal including an environmental assessment.

A meeting has been schedule with the RL representative to determine the appropriate approach to fulfilling the NEPA requirements. If an EA is required, a action description memorandum must be sent to DOE-HQ who will determine if an EA is the appropriate level of NEPA documentation.

In addition to NEPA requirements, an additional document may be required as the activity will be place within the 100 year floodplain of the Columbia River invoking RL's Floodplain/Wetlands Review Requirements (10 CFR 1022). Initially, a public notice must be published in the Federal Register to notify the public of the proposed action. A Floodplain/Wetlands assessment is then prepared and submitted to RL with the ERA Proposal/EA. A floodplain statement of findings is then incorporated into a FONSI.

A fisheries and hydraulic permit may also be required by the U.S. Army Corps of Engineers.

618-9 Burial Ground Expedited Response Action - Project was successfully completed October 1, 1992, with removal of the site fence and finishing the re-vegetation.

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Carbon Tetrachloride Expedited Response Action/Volatile Organic Compounds - Arid Integrated Demonstration

Baseline Monitoring

Moderately low pressure (29.06 in Hg) on 10/1/92 yielded occasional responses in the 216-Z-1A, 216-Z-12, and 216-Z-9 Area. The highest concentration measured at wellheads was 36 ppm.

On October 5, 1992, under very high pressure (29.46 in Hg), only one wellhead had detectable volatile organics (2 ppm), while the majority of soil gas probes did have detectable volatiles. Many of these probes rarely have volatiles present. The cone penetrometer points had exceptionally high readings (up to 6070 ppm).

Vapor Extraction System (VES) Operations

The first draft of the process and instrumentation diagram (P&ID) for the new 1500 cfm VES was received from Barnebey & Sutcliffe (B&S) on October 2, 1992. It was reviewed and comments relayed to B&S via conference call on October 6, 1992. It is expected that B&S will incorporate comments for review by the WHC design review team by the week of October 19, 1992. It is planned to visit B&S in Columbus the week of October 26, 1992, to bring design review comments and iron out the final draft of the P&ID, and also get the acceptance test procedure.

The Chemical Waste Disposal Request for shipment of the GAC canisters to the regeneration facility has been completed. Results are still not available from the Radon Test sampling with which to prepare the letter to RL for a waiver of the moratorium against shipping.

The specification for acquisition of the 500 cfm lease vapor extraction unit is in preparation. It is planned to be issued by October 16, 1992.

VES operations continue on a 12 hour schedule. Several hours were lost due to problems with the process control system requiring replacement of some board level components.

An overall project schedule is being prepared to incorporate all activities relative to preparing for vapor extraction at the 216-Z-9 Crib with the new 500 cfm lease unit, then with the larger 1500 cfm unit; upgrade of the existing 500 cfm unit at Z-1A to 1000 cfm; use of the new lease 500 cfm unit at Z-1A/Z-18; and winterization.

Two 20 horsepower motors for the vacuum blower have been ordered to enable realizing the full 500 cfm capability of the blower, the current 15 horsepower motor restricts capacity to approximately 250 cfm at 100 inches of water, vacuum. The blower is capable of 150 inches vacuum at 500 cfm, but is under-powered.

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CARBON TETRACHLORIDE EXTRACTION INFORMATION

Operational Date	Disposal Facility	Amount of CCl ₄ Removed (lb)	Average CCl ₄ Conc. (ppm)	Total Operational Time (hr)	Average Flowrate (SCFM)
8/13 - 8/19	216-Z-1A	65	420	42	160
8/19 - 8/25	216-Z-1A	125	583	47	190
8/26 - 9/3	216-Z-1A	79.34	459	32	210
9/3 - 9/9	216-Z-1A	21.3	580	9	175
9/10 - 9/16	216-Z-1A	73.82	560	36.5	175
9/17 - 9/23	216-Z-1A	66	500	36.3	150
9/24 - 9/30	216-Z-1A	77.3	661	30	158
10/1 - 10/7	216-Z-1A	132.9	858	38.3	166
Totals		1304.7*	580	271.1	182

* Includes amounts collected before 8/13

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Weekly Report, Week Ending October 16, 1992
EXPEDITED RESPONSE ACTIONS
Technical and Management Contact - Wayne L. Johnson, 376-1721
Environmental Division

North Slope Expedited Response Action - Ten boreholes were completed this week at a landfill near the H-83-L Nike Missile Site. The boreholes were installed to sample and characterize the soil near four anomalies detected by a geophysical survey conducted earlier on the landfill. The boreholes were completed to a depth of about 10 feet. Soil samples were collected from the 10-foot depth from several of the boreholes for CLP/SW-846 analysis.

The field screening team is supporting the landfill drilling at the H-83-L site on the North Slope. Because of the relatively unknown nature of this site, a wide variety of field screening techniques have been fielded. These include the OVA-128GC for headspace analysis using ambient temperature chromatography, XRF analysis, the Hazcat kit, the EnSys kit, and the Hach kit for hexavalent chrome. In one auger hole drilled on October 13, 1992, a void space containing a liquid (possibly a buried drum) was encountered. A sample of the liquid was obtained using a 60-cc syringe to draw a vacuum on a piece of Teflon tubing. The resulting sample was analyzed in the field, using a variety of methods. Headspace analysis with the OVA did not detect any volatile compounds. No evidence of heavy metals other than iron were detected with the XRF. The pH appeared to be between 6½ and 7 (based on narrow range paper). Tests conducted with the Hazcat kit indicated no combustible potential, minimal or no chlorine content, and no evidence of sulfides or cyanide. The EnSys kit gave a strong positive indication for petroleum hydrocarbons. From available data, it was concluded the liquid was water contaminated primarily with a petroleum oil product.

Pickling Acid Crib Expedited Response Action - The draft sampling and analysis plan for inclusion in the Pickling Acid Crib Expedited Response Action Plan has been completed. After the SAP has been incorporated into the plan it will be distributed for internal review. Field sampling activities are tentatively planned for November 16, 1992, to December 11, 1992, provided approval is received from the regulators.

Riverland Railroad Site Expedited Response Action - The Riverland NEPA documentation has been approved by RL.

Sodium Dichromate Expedited Response Action - The rough draft of the ERA proposal was completed based on field data. The off-site lab data will be incorporated upon arrival.

N-Springs Expedited Response Action - WHC has provided the N-Springs ERA project plan to RL for transmittal to EPA and Ecology. Work was initiated to prepare the ERA proposal.

618-11 Burial Ground Expedited Response Action - Obtained approval signatures from all managers on the FY 1993 CAPs. Prepared written guidance to the organization which will be doing the research and writing on the baseline historical report.

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618-9 Burial Ground Expedited Response Action - A letter has been sent to the U.S. Department of Energy requesting a completion report (letter) from the U.S. Environmental Protection Agency.

Carbon Tetrachloride Expedited Response Action - The work plan for fiscal year 1993 well field design is scheduled for completion on November 15, 1992. The current proposal is to install seven new extraction wells this year; two of these are the crib wells which will be deepened as part of the ID/ERA site characterization.

Test plans are being prepared for pilot testing of a passive vapor extraction unit, which is being designed based on the data we are collecting on site.

The specification of the 500 cfm lease vapor extraction unit is in preparation. It is planned to be issued by October 16, 1992.

VES operations continue on a 12-hour schedule (see table). There has been an increase in the carbon tetrachloride concentrations coming from the wells. Concentrations of 2000 ppm CCl_4 have been seen, up from the nominal 700 to 1000 ppm previously experienced. It should be noted that effluent concentrations stayed at or below 0.1 ppm CCl_4 . The cause of the increase is being investigated.

An overall project schedule is being prepared to incorporate all activities relative to preparing for vapor extraction at the 216-Z-9 Crib with the new 500 cfm lease unit, then with the larger 1500 cfm unit; upgrade of the existing 500 cfm unit at Z-1A to 1000 cfm; use of the new lease 500 cfm unit at Z-1A/Z-18; and VES winterization.

The process control system has been delivered. Plans are to install the process control system starting the week of October 19, 1992. It is planned to shut the vapor extraction system down for up to four weeks to install, configure, debug and make the system ready for 24 hours/day operation. During this period it is also planned to install the 20 horsepower motor for the vacuum blower and perform some of the winterization activities.

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9/17 - 9/23	216-Z-1A	66	500	36.3	150
9/24 - 9/30	216-Z-1A	77.3	661	30	158
10/1 - 10/7	216-Z-1A	132.9	858	38.3	166
10/7 -10/13	216-Z-1A	138.63	1019	44.75	136
Totals		1443.33*	636	315.85	153

* Includes carbon tetrachloride extracted prior to 8/13

NORTH SLOPE EXPEDITED RESPONSE ACTION FIELD INVESTIGATION WASTE CONTROL PLAN

1.0 INTRODUCTION

This plan presents the methods to be followed in controlling wastes generated during field investigation activities associated with the North Slope Expedited Response Action (ERA). Field investigation activities are described in WHC-SD-EN-TPP-01, WHC-SD-EN-AP-099. The sampling activities include obtaining surface and sub-surface soil samples using standard sampling equipment (i.e. hollow-stem auger and hand augers). Samples taken will be analyzed using field screening techniques to determine if hazardous contaminants are present. If field screening indicates presence of hazardous constituents, a sample will be collected for off-site analysis using either SW-846 or CLP protocol (EPA level III analysis).

2.0 SCOPE

This waste control plan applies to all wastes generated during sample collection activities. Cuttings from hollow-stem auguring are expected to make up the majority of waste generated. Other wastes include decontamination water, waste materials generated by field screening techniques and miscellaneous other wastes.

3.0 FIELD DESIGNATION/HANDLING OF WASTES

The wastes generated in support of the North Slope ERA will be managed according to WHC-CM-7-7, EII 4.3, Control of CERCLA and other Past-Practice Investigation Derived Waste. Regulatory agreement will be obtained if deviations from this procedure are necessary. Site specific waste handling methods are provided below.

The generation of hazardous wastes during sampling activities is not anticipated but is possible due to the nature of the materials being investigated. Waste materials having the potential for containing hazardous substances, such as drill cuttings from the use of the hollow-stem auger, will be field screened using a portable organic vapor monitor (OVM). If the OVM or other field screening instruments indicate the presence of contamination significantly above background levels (i.e. In the case of the OVM, 5 ppm above background at a distance of 1 in above the waste material) the waste will be drummed and designated suspect hazardous waste. A sample of the material will be collected for off-site analysis. The waste will be stored on-site until appropriate disposal actions are determined based on analytical results, and the action memorandum is issued for the ERA.

A central storage facility for all wastes generated during the ERA field investigation activities will be selected. It is anticipated that the central storage facility will be located near the H-83-L Nike missile site as this

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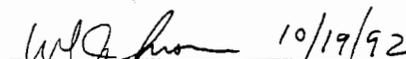
area is in the wildlife refuge, out of site from the main road, and is off-limits to the public and requires a key for vehicle access. A conex box or other lockable storage facility is available if additional security is required.

The State of Washington Department of Ecology, as lead regulatory agency, is requested to concur with the proposed plan prior to initiation of field activities. In addition, DOE and EPA concurrence is also desired. By concurring below all parties agree with this plan allowing the field investigation activities to proceed.


ECOLOGY REPRESENTATIVE


DOE-RL REPRESENTATIVE

 10/19/92
EPA REPRESENTATIVE

 10/19/92
WHC REPRESENTATIVE

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October 19, 1992

To: Wayne Johnson

From: Virginia Rohay

cc: Mike Hagood
Rick Cameron (Ebasco)

Re: Carbon Tetrachloride Inventory

A rough order-of-magnitude estimate of the quantity and phases of carbon tetrachloride in the subsurface of the 200 West Area was provided to Westinghouse Hanford Company on September 22, 1992 by Ebasco Services, Inc. The purpose of the estimate was to provide an improved basis for planning carbon tetrachloride sampling, analysis, and removal activities. The report contains analyses of the quantities of carbon tetrachloride lost due to evaporation and quantities remaining in the air, water, and soil phases of the vadose zone. The analyses are based on information provided in the ERA Proposal (EE/CA), unpublished soil gas data collected in support of the ERA, established methods and principles for estimating mass transfer, and best engineering judgement.

Based on the assumption that 750,000 kg of carbon tetrachloride were disposed, the current inventory is estimated to be:

<u>SEGMENT</u>	<u>MASS (kg)</u>	<u>FRACTION DISPOSED (%)</u>
Total evaporative losses	278,000	37
Vadose zone air	32,000	4
Vadose zone water	45,000	6
Vadose zone soil	108,000	14
Dissolved in aquifer	12,000	2
Unaccounted inventory	<u>275,000</u>	<u>37</u>
TOTAL	750,000	100

Perhaps of particular interest is the calculation of estimated losses of carbon tetrachloride due to diffusion from the ground surface. Based on numerous assumptions and a variety of data, the calculated diffusion of carbon tetrachloride up through the surface is 0.21 kg/hr in 1990, or 1,850 kg/yr, for the portion of the plume south of the T tank farm area.

I stress that these calculations are rough order-of-magnitude estimates based on numerous assumptions and sometimes scant data. Although I have not had the opportunity to fully review the report, I have confidence in the quality of Ebasco's work, and I want to make you aware of these estimates at an early date. I would be happy to provide more information if requested.

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