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Meeting Minutes Transmittal/Approval
Unit Manager's Meeting: Remedial Action and Waste Disposal Unit/Source Operable Unit
3350 George Washington Way, Room 1B45, Richland, Washington
June 19, 1997

FROM/APPROVAL: _____ Date 7/2/97
Nancy Werdel/Glenn Goldberg, 100 Area Unit Managers, RL (H0-12)

APPROVAL: _____ Date 7-2-97
Wayne Soper/Keith Holliday, 100 Aggregate Area Unit Manager, Ecology (B5-18)

APPROVAL: Pamela A Innes for Date 07/02/97
Dennis Faulk, 100 Aggregate Area Unit Manager, EPA (B5-01)

APPROVAL: _____ Date July 2, 1997
Bryan Foley, 200 Area Unit Manager, RL (H0-12)

APPROVAL: NA NA _____ Date 7-2-97
Joan Bartz/Shri Mohan, 200 Aggregate Area Unit Managers, Ecology (B5-18)

APPROVAL: N/A _____ Date _____
David Einan, 200 Area Aggregate Area Unit Manager, EPA (B5-01)

APPROVAL: _____ Date July 2, 1997
Robert G. McLeod, 300 Area Unit Manager, RL (H0-12)

APPROVAL: _____ Date 7/28/97
Jeanne Wallace, 300 Area Aggregated Area Unit Manager
WA Dept of Ecology (B5-18)

APPROVAL: _____ Date 2 July 97
David R. Einan, 300 Area Aggregated Unit Manager, EPA (B5-01)

APPROVAL: _____ Date 11 July 97
Ted A. Wooley, 300 Area Process Trenches Subproject Manager
200 B Area Project Manager

Meeting Minutes are attached. Minutes are comprised of the following:

Attachment #1	-	Agenda
Attachment #2	-	Attendance Record
Attachment #3	-	Meeting Minutes
Attachment #4	-	Status Package All Source Operable Units
Attachment #5	-	100 Area Status Package
Attachment #6	-	200 Area Status Package
Attachment #7	-	200-BP-1 Source Operable Unit Package
Attachment #8	-	300 Area Status Information

Prepared by: Gary Gesell Date 7/29/97
Gary Gesell/Tamen Rodriguez (H0-17)

Concurrence by: T. R. Dronen Date 7/30/97
Vern Dronen, BHI Remedial Action and Waste Disposal Project Manager (H0-17)

UNIT MANAGERS' MEETING AGENDA

3350 George Washington Way, Room 1B45
June 19, 1997

1:00 p.m. 300 Area

300 FF-1
- Status of Remedial Action

300-FF-2
- Groundwater Sampling

1:50 p.m. 200 Area

200-UP-11
- Field Characterization Borehole

2:00 p.m. 100 Area

100 Assessment/Design
- Burial Ground Task Team (status and path forward)
- Remaining Sites Task Team (status and path forward)
- Next Steps for 2,4-D Burial Site
- Sampling Results from 190-C Subsurface Investigation

Remedial Action
- Status of Work at 100-B/C and 100-D Remediation Sites
- Comments on Rev. 1 of the RDR/RAWP
- Progress on Resolution of Concrete Matrix and Lead Encapsulation

NOTE: The 200 Area UMM for the 200-UP-2 will meet on an as-needed basis per the November 1996 UMM minutes.

Remedial Action and Waste Disposal Unit Managers' Meeting
Official Attendance Record
June 19, 1997

Please print clearly and use black ink.

Printed Name	Organization	O.U. Role	Telephone
Larry Hulstrom	CHI	300 Area Tech. Support	372-9319
Fred Roecke	BHI	Environmental Lead	372-9076
Phil Start	Ecology		736-3029
Jeanne Wallace	Ecology	PM	736-3019
Ted Wooley	Ecology	UM 300 AOT	736-3012
Richard Carlson	BHI	Technical Lead	373-3008
Bob McLeod	DOE	PM	372-0096
Dave Einan	EPA	PM	376-3883
CHARLIE JOHNSON	BHI	TASK LEAD	373-6372
Greg Mitchem	CHI	200 Task Lead	372-9632
Bryan L. Foley	DOE RL	200 Area PM	376-7087
Curt Wittreich	CHI	200 A Tech Suppt	372-9586
Chuck Hedel	CHI	100 Area Tech Supp	372-9637
Walter Kemna	BHI	RAWD	2-9620
[illegible]	BHI	"	2-9556
Keith Holliday	Ecology	0- Area	736-3036
Frank Corpuz	BHI	Project Engineer	373-1661
Wayne Soper	Ecology	P M	736-3049
Pamela Innis	EPA	P.M.	376-4919
Rick Donaldson	BHI	Task Lead	531-0654
Glenn Goldberg	DOE	Proj. Manager	376-9552
Jeff James	BHI	RAWD TASK LEAD	372-9563
Gary Gesell	BHI	RAWD Lead Editor	372-9067

Unit Managers' Meeting Minutes
June 19, 1997

100 AREA

100 Assessment/Design

Burial Ground Task Team (status and path forward)

Documentation for team activities/agreements: Prepare package and submit to the team for review.

The management presentation will go to individual operable unit managers; there will be no brown-bag presentation unless specifically requested.

Remaining Sites Task Team (status and path forward)

It was decided that the Agreements could be discussed at the July 1997 Unit Managers' Meeting (i.e., schedule, outlines, flow diagram, table of contents, cover page; provide the preliminary waste site list and state that the information will be organized and updated as sites are reviewed and dispositioning occurs).

Next Steps for 2,4-D Burial Site

May sampling results indicate that 2,4-D contains dioxins; a data summary were provided to the U.S. Environmental Protection Agency/Washington State Department of Ecology (Ecology) to discuss remedial alternatives during the week of June 23, 1997.

Sampling Results from 190-C Subsurface Investigation

No soil contamination above cleanup standards was found beneath the building; demolish in-place will go forward, as planned. Ecology asked if chromium soil sampling will go forward at 190-D; it is possible, but it is also being included in the FY98 Multi-Year Work Plan (MYWP).

Remedial Action

Status of Work at 100-B/C and 100-D Remediation Sites

Four plumes were discovered, one of which is 25% above volume. The "clean" overburden soil at 116-C-1 (northeast #4 plume) was removed and stockpiled.

The MYWP was discussed, and a schedule was provided to the attendees.

A second shift of drivers may be used next year to increase productivity. However, Bechtel Hanford, Inc. (BHI) needs approval for night driving from the U.S. Department of Energy, Richland Operations Office (RL).

Comments on Rev. 1 of the Remedial Design Report/Remedial Action Work Plan

No comments.

Progress on Resolution of Concrete Matrix and Lead Encapsulation

Please see Attachment 5. A meeting is scheduled for June 25, 1997, to further discuss this issue.

200 AREAS

200-BP-11

Field Characterization Borehole

The activities leading to the drilling of a borehole for sampling at the 216-B-2-2 Ditch was discussed. Ecology was briefed on the history, status of FY97 activities, schedule, and estimated costs (Attachment 7). Ecology was also given a draft of the sampling location and analyte list (Attachment 6). Several items were raised by Ecology; these topics, as well as the resolutions, are documented below:

- The Appendix C update for the 200 Areas soil waste sites was mentioned. Ecology wanted to ensure that the update would follow the Tri-Party Agreement Guidance documentation. RL stated that Patrick Willison and Nancy Werdel would be consulted to ensure that this will be done.

- Ecology supported the borehole, but needed to ensure that the public review of the work plan requirements were addressed and that BHI was not "getting ahead of ourselves" in drilling the borehole in the first quarter of FY98. Ecology wants to make sure that it is the right borehole and that BHI is getting the right information.

- Ecology wanted to ensure that the investigation derived waste generated will be properly managed. It was mentioned that the Waste Control Plan required to be developed for the project will address these concerns.

- The schedule for RL/Ecology to begin reviewing the Description of Work (DOW) (and attached Sampling and Analysis Plan) on June 25, 1997, is acceptable; however, Ecology needs to look at the DOW and the above items to determine whether a 10-day review period is feasible. A tentative meeting was set for July 7, 1997, 9:00 a.m. at Ecology offices to review the DOW comments and status the schedule of activities.

300 AREA

300-FF-1

Remedial Action Status

BHI began excavating six test pits at the existing clean soil stockpile on June 18. If the first four pits are clean, BHI will proceed on the remaining two pits. A manhole was discovered near the clean soil stockpile, which was not identified on the drawings. BHI is locating the underground line and will determine how deep it is buried. No impacts are expected.

Radiological contamination was discovered in the first test pit of the process trenches.

A discussion was held on the proposed sample locations under the two concrete aprons for the process trenches. The original plan was to lift/remove the concrete apron and collect two samples. The remedial action subcontractor proposed to cut/bore a hole through the concrete to collect the sample due to the extra thickness of the concrete and extensive rebar in the concrete apron. There were some concerns regarding this approach. After some discussion, all parties agreed that a sample will be taken from under the edge of each apron, for a total of two samples.

The Readiness Assessment meeting and site walkdown was held on June 16. Six "open action items" were noted at the meeting. Four action items were completed on June 17, and one item was completed on June 19. The remaining item will be completed on June 20.

300-FF-2

Groundwater Sampling

Activities associated with the July groundwater sampling at well 699-S6-E4A were initiated. Rust Federal Services personnel will test the sampling pump on June 24, 1997. If necessary, the pump will be replaced and sampling of the well will take place at that time. Environmental Restoration Contractor (ERC) samplers will take samples to fulfill ERC needs.

Attachment 4

STATUS PACKAGE

UNIT MANAGERS' MEETING - JUNE 1997

SOURCE OPERABLE UNITS

100-B/C, 100-K, 100-D, 100-H, 100-F

200 AREAS

300 AREA

prepared by

DOE-RL

6/19/97

100 AREAS

General

Since March 1997, monthly 100 Area Unit Manager Meetings (UMM) have been replaced by task team meetings for Remaining Sites and Burial Grounds; however the UMM meetings will resume in June 1997.

100 Area Record of Decision (ROD) Strategy

Following a January 24, 1997, meeting with Tri-Party senior management, the Washington State Department of Ecology (Ecology), the U.S. Environmental Protection Agency (EPA), and the U.S. Department of Energy, Richland Operations Office (RL) formed task teams to address the 100 Area Remaining Sites ROD Strategy and remediation of the 100/300 Area burial grounds. The teams were responsible to determine a strategy and a path forward for *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* decision documents for burial grounds and for all other waste sites in the 100 Areas (termed "Remaining Sites"). The teams met approximately three times per month through May 1997. Following is the status of the two task team efforts:

- *100 Area Remaining Sites ROD Strategy*:
  The task team developed a strategy and decision criteria to disposition Remaining Sites into agreed-upon categories for presentation in a proposed plan. Work was closely coordinated with Tri-Party staff focused on updating the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) appendices for 100 Area waste sites. Plans were made to apply the criteria to specific waste sites and to prepare supporting information for inclusion in the Administrative Record (AR). A schedule to issue a ROD for Remaining Sites was developed, and outlines for AR documentation and a proposed plan were also prepared. In May, the Team agreed to adjourn and implement agreements developed by the Team. Draft agreements developed by the Team will be discussed at the June UMM, which include the following: a summary of the decision logic, criteria, report outlines, and a schedule.

- *Burial Ground Strategy*:
  The task team prepared a preliminary workscope for feasibility studies to evaluate the potentially viable remediation alternatives applicable to each type of burial ground. No future Team meetings are being planned. Remaining open issues for the Team include (1) using new cost-modeling assumptions to ensure the current baseline is consistent with the expectations of the team members and (2) deciding whether to remediate a 100 Area burial ground as an "early action" (in addition to waste site 618-4 in the 300 Area) to obtain additional information on excavating burial grounds. These issues will be addressed in one-on-one meetings with Team members and as part of other forums (e.g., UMMs, Multi-Year Work Plan reviews, etc.), as appropriate.

190-C Soil Sampling Project

Sampling and analysis of soil beneath the building floor was completed during May 1997. Preliminary results for deep zone constituents indicate that concentrations are below remediation goals. Report preparation is underway.

North Slope 2,4-D Burial Site

Field investigation activities have confirmed the presence and extent of soil contamination surrounding the "hot spot" that was discovered a few weeks ago. Laboratory analysis results to identify specific properties of the soil contaminants will be available by mid-June 1997. Additional information suggests there may be other localized hot spots. Based on this preliminary information and historical data, the regulatory status of the contaminants (listed versus characteristic hazardous waste) is being evaluated, and remediation alternatives are being developed.

100, 200, and 300 Area Decant Liquid Disposal

Disposal of water decanted from investigation derived waste at the Effluent Treatment Facility (ETF) in the 200 Areas began in late May 1997 and will be completed during June 1997.

100-D Ponds Closure Plan Revision

An equivalency demonstration to dispense with postclosure groundwater monitoring was submitted to Ecology in May 1997 in advance of the complete closure plan. The equivalency demonstration is an integral part of the overall closure plan and merits discussion with Ecology. Work on revising the overall 100-D Ponds Closure Plan has been completed and is currently being reviewed by RL. Ecology's request for deep vadose zone borehole samples has not been resolved.

Remedial Design Report (RDR)/Remedial Action Work Plan (RAWP) Update

The RDR/RAWP was updated to Rev. 1, Draft A and issued to EPA and Ecology for concurrence. The update to the RDR/RAWP is an integrated revision of the subject material, taking into account the following categories of changes:

- Numerical and text changes to address EPA/Ecology comments provided in their letter dated June 26, 1996. Such changes include numerical and text revisions to reflect the use of the RESRAD computer model to determine the contaminants that reach groundwater (and the application of the MTCA 100X standard to those contaminants) to demonstrate groundwater and Columbia River protection

- Numerical and text changes to explain the dilution-attenuation factor and its use with the MTCA 100X standard

- Numerical and text changes to reflect the applicability of MTCA, MCLs, and state and federal AWQC, whichever is most restrictive

- Numerical and text changes to correct errors in the previous revision.

Remedial Design Groups 3 and 4

The remedial design for the 100 Area Group 3 sites is now substantially completed. A presentation on the remedial design for this group of sites is slated for late June.

The remedial design for the 100 Area Group 4 sites has recently begun. The first draft of the remedial action subcontract package is slated to be issued in late June. A field investigation of selected sites is scheduled for mid-summer.

100 B/C

Remedial Action - Excavation of plume material continues at 116-C-1. A third plume was discovered which, when combined with the other two plumes, constitutes approximately 25% of the original volume of the 116-C-1 waste site. Approximately 50% of the excavation is complete in the 116-C-5 Retention Basin. A detailed pipeline excavation plan is being developed, along with an asbestos abatement program for the pipe wrap.

100 DR

Remedial Action - Excavation of plume material in 116-DR-1 and 116-DR-2 was halted in May due to possible undermining of support facilities and haul roads. The plume volume is currently greater than 150% of the original waste site volume. The remainder of the plume will be removed at a later date. Removal of contaminated material above the concrete walls and slabs in the 116-D-7 Retention Basin was initiated and completed in May. Similar work will start in the 116-DR-9 Retention Basin in June. Meetings were held with RL and the regulators in June to begin discussions on handling of matrix material containing metals.

200 AREAS

200 Areas Strategy

Working meetings for the 200 Areas Strategy are ongoing. The Agreement-In-Principle was signed on April 30, 1997. Public comments on the Tri-Party Agreement change package begin on June 30, 1997. A presentation to the Hanford Advisory Board (HAB) Environmental Restoration subcommittee was made to update the strategy effort, and a followup meeting is scheduled for June 12, 1997. A draft Tentative Agreement is being developed and will be signed on June 20, 1997. Tribal consultations were held in May, and a full HAB presentation is scheduled for July 1997.

200-BP-1 Operable Unit

The barrier testing program continues to provide data on water infiltration, vegetation growth, and biointrusion associated with the Hanford Site barrier. Multi-Year Work Plan activities are underway, and the plan is to stop the 3-year testing program at the end of fiscal year (FY) 1997. Additional asphalt and settlement testing were deferred to FY 1998. A final report will be generated after these activities are completed.

200-BP-11 Operable Unit

The initiation of work on a Description of Work for a borehole at the B-2-2 Ditch has resulted in greater detail on how the borehole work will be performed. Coordination of this work between RL and Ecology is needed to avoid work delays.

Nonradioactive Dangerous Waste Landfill

The scope of activities associated with the Nonradioactive Dangerous Waste Landfill is being evaluated. Some soil-gas work will be planned for later this FY. A data quality objective session will be initiated on June 9, 1997, to develop the scope for the soil-gas survey work.

300 AREA

300-FF-1 Operable Unit

Remedial Action - The Remedial Action Subcontractor, Roy F. Weston, Inc., initiated mobilization activities on May 12, 1997. Mobilization and site preparation are well underway.

The following major facilities have been mobilized to the site: subcontractor's office trailer, waste profile station, and change facility. The frisking station is currently under construction at the site. The container que area construction and haul road upgrades are nearly complete. The facilities will be completed on June 13. A project readiness assessment is planned for June 16. Test pits and trenches will be initiated on June 18.

300 Area Process Trenches - Two Class 1 Permit Changes were drafted and submitted into the review process. The two changes would revise the permit to (1) accurately reflect that Ecology is approving the 300-FF-1 Sampling and Analysis Plan (SAP) via a memo and, therefore, the SAP is not required to be incorporated into the permit and (2) delete the Ecology signature requirement on the 300-FF-1 Operations and Maintenance Plan since it has been determined that an O&M Plan is not needed.

300-FF-2 Operable Unit

Groundwater Sampling - The eight drums of waste from well upgrade activities at well 699-S6-E4A were temporarily moved to the 300-FF-1 Operable Unit radiological material area. Removal of liquids from these investigation derived waste drums occurred on May 29, 1997. The liquid will be treated at the 200 Area ETF.

ISSUE:

Construction materials within matrix of demolition debris have high lead (Pb) concentrations in excess of ERDF WAC LDR limits (5 ppm for specific waste forms).

The 116DR9 and 116D7 concrete lined retention basins (100 D Group 2 Sites) have encountered this condition during current remediation work. In the immediate and near future, the 116B11 basin (100 BC Group 1 Sites), and the 116H7 and 116 F14 basins (100 H and F Group 4 Sites) have similar conditions that will also require resolution. In total, 5 known basins within the current forecasted ERC Remedial Action work where this condition occurs. D&D and other RA/WD sites are likely under these conditions as well.

Copper water stops (600 ppm leachable Pb per TCLP) within concrete, and concrete surface coatings (10 ppm leachable Pb per TCLP) are the currently known materials.

PROPOSED RESOLUTION:

Take construction demolition debris as a whole to ERDF, without separation and treatment of the high Pb concentration materials. 57 CFR 958 allows for consideration of this approach.

IMPACTS:

If Separation and Treatment is required:

ROM Cost: **$0.5M per above identified basin. 5 basins, $2.5M.**

ROM Schedule: **Current - A decision is needed within two to three weeks time, for current work at 100D. If no decision, there will be a schedule delay for completion of the basin excavation work for 116DR9 and 116D7.**

ERC Programmatic - Assuming separate, additional funding not received defferal of 100 Area RA work completion, proportionate to the ROM Cost impact. $2.5M is on the order of 1 to 2 years of subcontracted work.

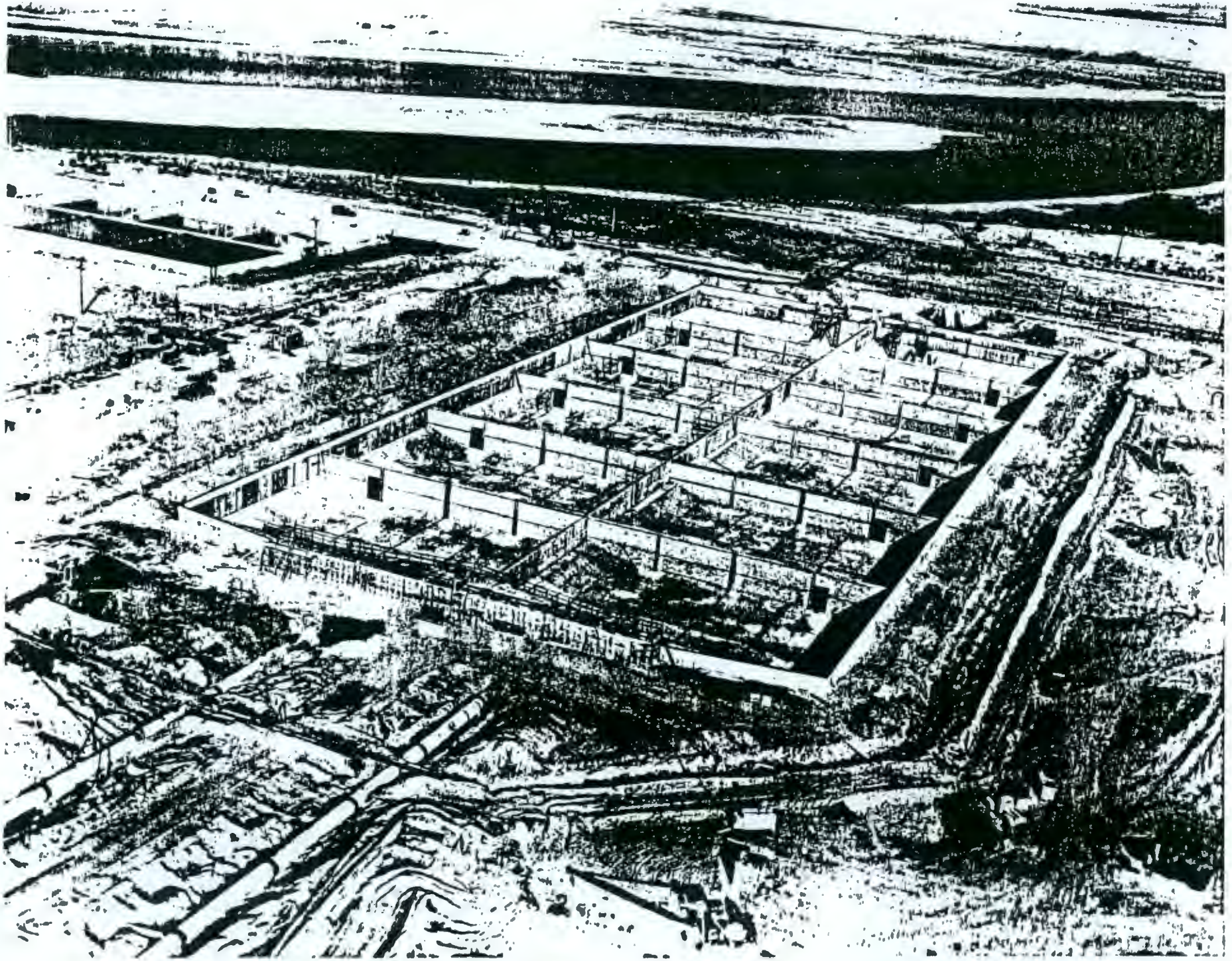
ALARA: **0 to 10mR/hr range exposure for workers during separation**

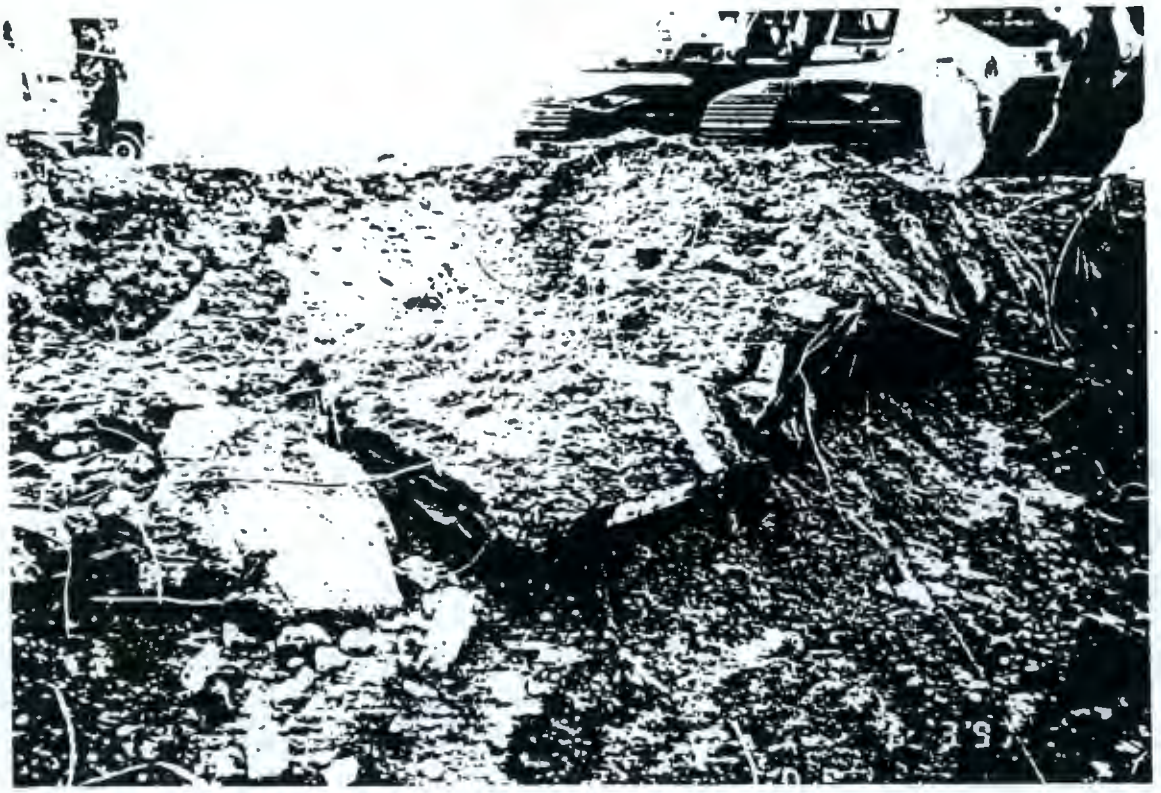
If Separation and Treatment is not required:

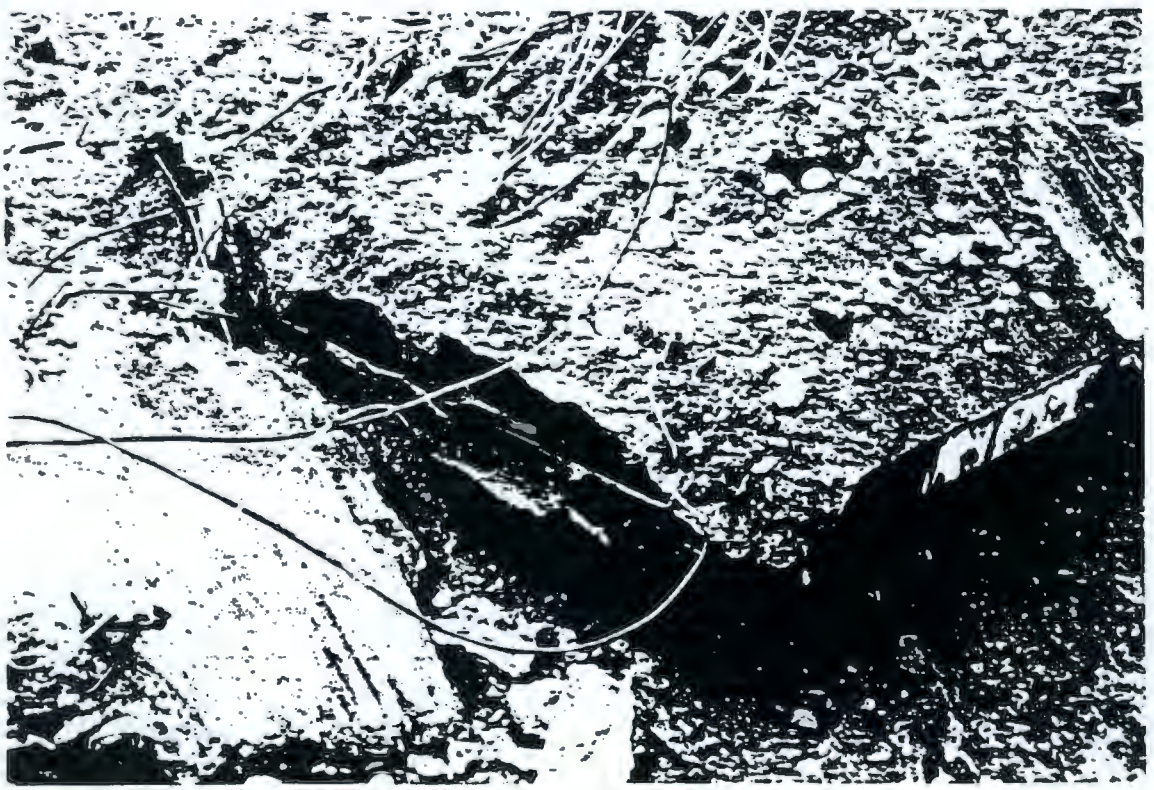
Actual environmental impacts/potential of matrixed construction debris leaching lead and impacting groundwater is questionable. A primary issue is validity of TCLP test being representative of ERDF conditions - acid leach, breakdown and separation of materials, aggressive physical environment.

STATUS:

A meeting with EPA local and regional and ECOLOGY (for concurrence) is being scheduled for presentation and concurrence with approach. In parallel, a white/position paper is being prepared by ERC for DOE-RL as background for formal submittal to EPA and ECOLOGY.







ISSUE:

Isolated waste materials encountered at the 100 BC Group 1 and 100 D Group 2 sites, with elevated leachable lead (Pb) concentrations above ERDF WAC LDR limits (5 ppm for specific waste forms), has resulted in a need for treatment prior to disposal at ERDF. These waste materials consist of lead brick and blanket material, and rubber and asbestos rope material with leachable lead. Current accumulated quantity is estimated to be on the order of 5 cubic yards in volume. Future waste volume in this category for current RA waste sites is unknown at this time.

PROPOSED RESOLUTION:

Macroencapsulation based on 40 CFR 268, which identifies Macroencapsulation as surface coating materials such as polymeric organics (e.g., resins and plastics) or with a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media.

Concrete encasement is the current proposed resolution for existing subcontracts for implementability considerations. The concrete will have a minimum 2-inch cover over all waste form surfaces. Verification of minimum cover, and integrity of the encasement during construction, transportation and disposal placement at ERDF will be part of the final design, analysis, and implementation guidance. Innovative and new technologies can be demonstrated and considered for future ERC applications.

IMPACTS:

ROM Cost: TBD. For current accumulated waste volumee, anticipated to be a relatively minor cost change with concrete encasement, utilizing existing subcontractor forces and no specialty work or mobilization. Estimated that innovative or new treatment technologies would be higher total project cost compared to concrete encasement.

ROM Schedule: TBD. For current accumulated waste volumes, anticipated to be a relatively minor schedule impact with concrete encasement, utilizing existing subcontractor forces and no specialty work or mobilization. Estimated that innovative or new treatment technologies would require a longer schedule duration compared to concrete encasement.

STATUS:

A meeting with EPA local and regional and ECOLOGY is being scheduled for presentation and concurrence with approach. In parallel, a white/position paper is being prepared by ERC for DOE-RL as background for formal submittal to EPA and ECOLOGY.

The currently identified waste materials are being interimly stored within the Area of Contamination at the individual waste sites, in appropriate containers labeled and posted accordingly accordingly (Pb, asbestos identified, RMA).

Figure B-1. Borehole Sample Collection Intervals

DRAFT

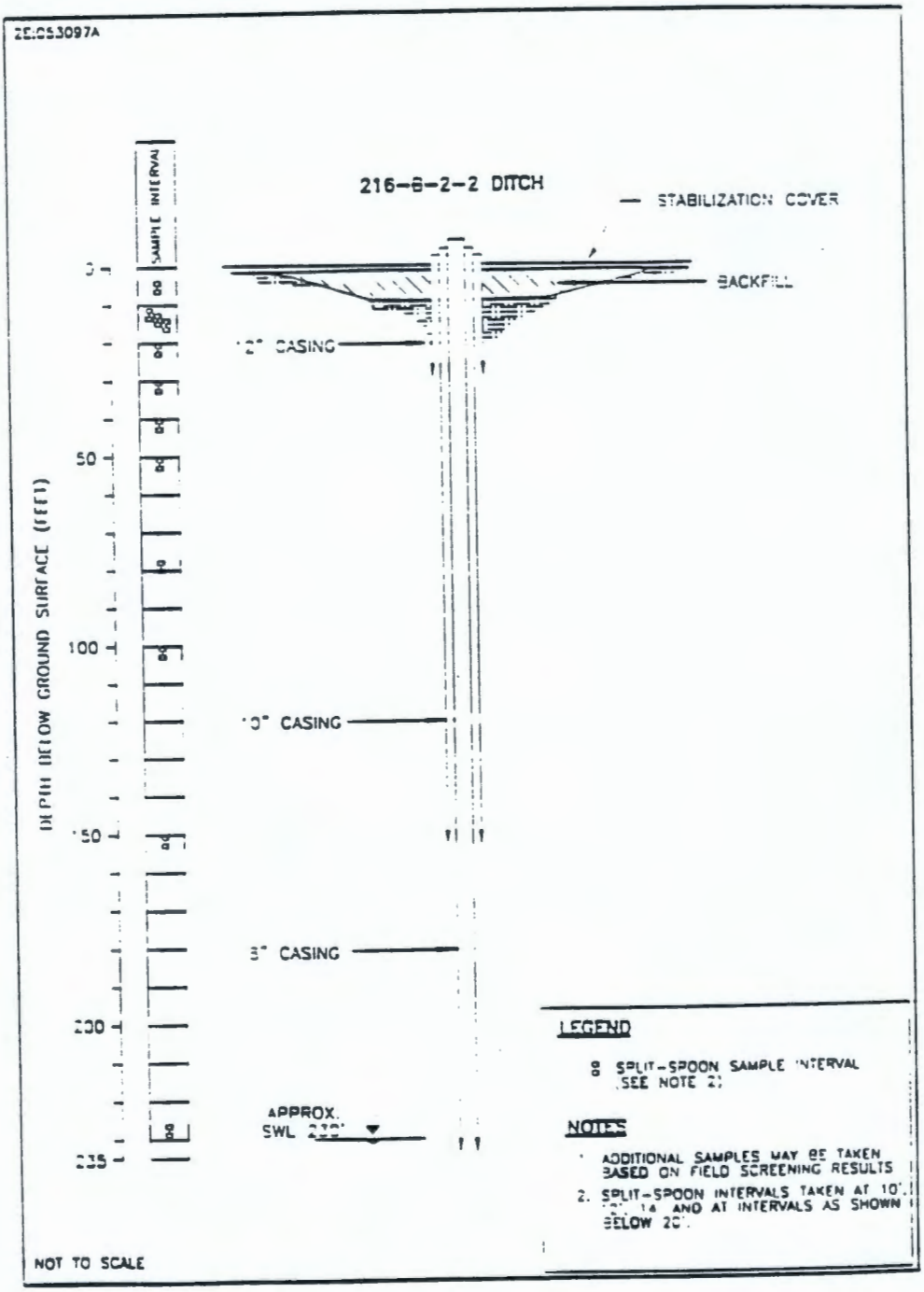


Table B-1. Target Analytes and Analytical Methods Taken from DOE/RL 1995 (Table 5-7) (Sheet 1 of 4)

Analyte[a]	Analytical technique/method[b]	Practical quantitation limits (nonrad) or minimum detection limits (rad)[c]	Comments
METALS			
Arsenic	GFAA 7060	0.3	
Barium	ICP/6010	1	
Beryllium	ICP/6010	1	
Bismuth	ICP/6010	TBD	
Boron	ICP/6010	10	
Cadmium	ICP/6010	2	
Chromium-VI	ICP/6010	2	
Copper	ICP/6010	2	
Iron	ICP/6010	10	
Lead	ICP/6010 (or 7421)	10 (or 0.3)	
Manganese	ICP/6010	1	
Mercury	AA/7471	0.1	
Nickel	ICP/6010	4	
Potassium	ICP/6010	500	
Selenium	GFAA/6010 (or 7740)	25 (or 0.3)	
Silver	ICP/6010	20	
Tin	ICP/7870	50	
Vanadium	ICP/6010	2	
Zinc	ICP/6010	2	
IONS			
Acetate	Semi-VOA/8270	TBD	Analyzed as a TIC
Ammonia (ammonium)	IC/350.2	30	
Cyanide	Colorimetric/CLP Metals/9010	0.8	
Nitrate	IC/300 and 353	6	
Nitrite	IC/300 and 353	100	
Sulfate	IC/300	150	

Table B-1. Target Analytes and Analytical Methods Taken from DOE/RL 1995 (Table 5-7) (Sheet 2 of 4)

Analyte[a]	Analytical technique/method[b]	Practical quantitation limits (nonrad) or minimum detection limits (rad)[c]	Comments
ORGANICS			
Acetone	VOA/8240	10	
Butanol, 1-	VOA/8240	TBD	Analyzed as a TIC
Butanone, 2- (MEK)	VOA/8240	10	
Carbon Tetrachloride	VOA/8240	5	
Chloroform	VOA/8240	5	
Ethyl Ether	VOA/8240	TBD	Analyzed as a TIC
Methylene Chloride	VOA/8240	5	
Trichloroethane, 1,1,1-	VOA/8240	5	
Trichloroethane, 1,1,2-	VOA/8240	5	
Toluene	VOA/8240	5	
Formaldehyde	Semi-VOA/8270	TBD	Analyzed as a TIC
Kerosene	Semi-VOA/8270	5,000	
PCBs	Semi-VOA/8080	33	
Tributyl Phosphate	Semi-VOA/8270	TBD	
Naphtalene	Semi-VOA/8270	660	Special calibration required
RADIONUCLIDES			
Gross Alpha	Gas Proportional	--	
Gross Beta	Gas Proportional	--	
Cesium-137	Gamma Spectrometry/ D3649M	0.1	Measured by counting Ba-137m
Cobalt-60	Gamma Spectrometry/ D3649M	0.05	
Europium-152	Gamma Spectrometry/ D3649M	0.1	
Europium-154	Gamma Spectrometry/ D3649M	0.1	

Table B-1. Target Analytes and Analytical Methods Taken from DOE/RL 1995 (Table 5-7) (Sheet 3 of 4)

Analyte[a]	Analytical technique/method[b]	Practical quantitation limits (nonrad) or minimum detection limits (rad)[c]	Comments
RADIONUCLIDES (cont.)			
Europium-155	Gamma Spectrometry/ D3649M	0.1	
Uranium-235 (Pa-231)	Gamma Spectrometry/ D3649M	1.0	Most samples measured by counting Pa-231
Americium-241	Alpha Spectrometry/Am-01	1.0	
Curium-244	Alpha Spectrometry/907.0M	1.0	May also use gamma spectrometry
Neptunium-237	Alpha Spectrometry/907.0M	1.0	
Plutonium-238	Alpha Spectrometry/Pu-02	1.0	
Plutonium-239/240	Alpha Spectrometry/Pu-02	1.0	
Plutonium-241	Alpha Spectrometry/Pu-02	15.0	
Thorium-228	Alpha Spectrometry/	TBD	
Thorium-230	Alpha Spectrometry/	1.0	
Thorium-232	Alpha Spectrometry/	1.0	
Uranium-233/234	Alpha Spectrometry/U	TBD	Most U-233/234 samples counted by measuring Pa-231m
Uranium-235	Alpha Spectrometry/U	1.0	Most U-235 samples measured by counting Pa-231
Uranium-236	Alpha Spectrometry/	TBD	
Uranium-238	Alpha Spectrometry/U	TBD	
Iodine-129	Beta Counting/902.0M	2.0	
Strontium-90 (Y-90)	Beta Counting/SR-02	1.0	
Technetium-99	Beta Counting/TC-01M	15.0	Measured by counting Y-90
Selenium-79	Beta Counting/	5.0	
Samarium-151	Beta Counting/	TBD	
Additional Analytes for Water Samples Only			
Fluoride	IC/300	51	Water only
Carbon-14	Liquid Scintillation/C-01	50	Water only
Tritium (H-3)	Liquid Scintillation/906.0	400	Water only

GFAA = Graphite Furnace Atomic Adsorption

Table B-1. Target Analytes and Analytical Methods Taken from DOE/RL 1995 (Table 5-7) (Sheet 4 of 5)

ICP = Inductively Coupled Plasma
AA = Atomic Adsorption
VOA = Volatile Organics Analysis
TIC = Tentatively Identified Compound
IC = Ion Chromatography
CLP = Contract Laboratory Program
TBD = To be determined
M = method modified to include extraction from the solid medium; extraction method is matrix and laboratory specific

"Prescribed Procedures for Measurement of Radioactivity in Drinking Water" (EPA 1980a)
"Test Methods for Evaluating Solid Waste" (SW 846) Third Edition (EPA 1994b)
"Methods for Chemical Analysis of Water and Waste" (EPA 1983b)
"Radionuclide Method for the Determination of Uranium in Soil and Air" (EPA 1980b)
"EML Procedures Manual" (DOE/EML 1990)
"Eastern Environmental Radiation Facility RadioChemistry Procedures Manual" (EPA 1984)
"High-Resolution Gamma-Ray Spectrometry of Water" (ASTM 1985)

[a]See Chapter 3 for discussion on progeny isotopes whose concentrations may be derived from known parent concentrations. Radionuclides related to U-238 include Th-230, Bi-210, Bi-214, Po-214, and Po-218. Radionuclides related to U-235 include Th-231, Tl-207, Pb-211, Pb-214, and Bi-211. Nb-93m is related to Zr-93. Pu-241 concentrations are inferred from Pu-238, Pu-239, and Pu-240. The radionuclides listed in parentheses under the analyte column are measured as part of the analysis of the adjacent radionuclide.

[b]These analytical methods should be considered examples of possible analytical techniques to use. Individual laboratories may have other techniques developed for some analytes. Analytical priorities are discussed in Section 5.1.5.

[c]Units for metals are mg/kg (ppm), ug/L for ions, ug/kg (ppb) for organics, and pCi/g for radionuclides

[d]The uranium analyses will be conducted periodically to confirm the uranium concentrations calculated from the Pa-234m or Pa-231 analyses. Two samples from each boring and one sample from each test pit/auger will undergo this confirmatory analysis. No uranium analyses will be done on surface soil or sediment samples.

[e]Analytes that will be studied by beta counting are listed in the order that they should be analyzed (e.g., the Sr-90 analysis should be made first, followed by the Tc-99 analysis).

Table B-2. Analytes of Interest, Analytical Methods, Quantitation Limits, and Precision and Accuracy Guidelines Modified from DOE/RL 1995 (Table 5-7)

(Page 1 of 6)

Analyte	Analytical Method	Target Quantitation Limit Soil[a]	Precision, Soil[b]	Accuracy, Soil[b]	Target Quantitation Limit Water[a]	Precision, Water[b]	Accuracy, Water[b]
Acetone	8240[c]	10 µg/kg	±20	75-125	TBD	±20	75-125
Butanol, 1-	8240[c,d]	TBD µg/kg	±20	75-125	TBD	±20	75-125
Butanone, 2- (MEK)	8240[c]	10 µg/kg	±20	75-125	TBD	±20	75-125
Carbon tetrachloride	8240[c]	5 µg/kg	±20	75-125	TBD	±20	75-125
Chloroform	8240[c]	5 µg/kg	±20	75-125	TBD	±20	75-125
Ethyl Ether	8240[c,d]	TBD µg/kg	±20	75-125	TBD	±20	75-125
Methylene chloride	8240[c]	5 µg/kg	±20	75-125	TBD	±20	75-125
Toluene	8240[c]	5 µg/kg	±20	75-125	TBD	±20	75-125
Trichloroethane, 1,1,1-	8240[c]	5 µg/kg	±20	75-125	TBD	±20	75-125
Trichloroethane, 1,1,2-	8240[c]	5 µg/kg	±20	75-125	TBD	±20	75-125
Formaldeyde	8270[c,d]	TBD µg/kg	±20	75-125	TBD	±20	75-125
Kerosene	8270[c,d]	5,000 µg/kg	±20	-50	TBD	±20	75-125
Tributyl Phosphate	8270[c,d]	TBD µg/kg	±20	75-125	TBD	±20	75-125
Polychlorinated Biphenyls	8080[c]	21 or 33 µg/kg	±20	75-125	TBD	±20	75-125
Naphthalene	8270[c]	660 µg/kg	±20	75 125	TBD	±20	75-125
Arsenic	7060[c]/6010[d]	0 3 mg/kg	±20	75-125	TBD	±20	75-125
Barium	6010[c]	1 mg/kg	±20	75-125	TBD	±20	75-125
Beryllium	6010[c]	1 mg/kg	±20	75-125	5 mg/l	±20	75-125
Bismuth	6010[c,e]	TBD mg/kg	±20	75-125	TBD	±20	75-125
Boron	6010[c]	10 mg/kg	±20	75-125	TBD	±20	75-125
Cadmium	6010[c]	2 mg/kg	±20	75-125	2 mg/L	±20	75-125

Table B-2. Analytes of Interest, Analytical Methods, Quantitation Limits, and Precision and Accuracy Guidelines Modified from DOE/RL 1995 (Table 5-7)

Analyte	Analytical Method	Target Quantitation Limit Soil[a]	Precision, Soil[b]	Accuracy, Soil[b]	Target Quantitation Limit Water[a]	Precision, Water[b]	Accuracy, Water[b]
Chromium	6010[c]	2 mg/kg	±20	75-125	10 mg/l	±20	75-125
Copper	6010[c]	2 mg/kg	±20	75-125	10 mg/l.	±20	75-125
Iron	6010[c]	10 mg/kg	±20	75-125	30 mg/l.	±20	75-125
Lead	6010 or 7421[c]	10 or 0.3 mg/kg (respectively)	±20	75-125	5 mg/l.	±20	75-125
Manganese	6010[c]	1 mg/kg	±20	75-125	5 mg/l	±20	75-125
Mercury	7471[c]/245.2[c,d]	0.1 mg/kg	±20	75-125	0.1 mg/l	±20	75-125
Nickel	6010[c]	4 mg/kg	±20	75-125	10 mg/l.	±20	75-125
Potassium	6010[c]	500 mg/kg	±20	75-125	TBD	±20	75-125
Selenium	6010[c] or 7740[c]	25 or 0.3 mg/kg (respectively)	±20	75-125	TBD	±20	75-125
Silver	6010[c]	20 mg/kg	±20	75-125	10 mg/l	±20	75-125
Tin	7870[c]	50 mg/kg	±20	75-125	TBD	±20	75-125
Vanadium	6010[c]	2 mg/kg	±20	75-125	TBD	±20	75-125
Zinc	6010	2 mg/kg	±20	75-125	5 mg/l.	±20	75-125
Acetate	8270[c,e]	TBD	±20	75-125	TBD µg/l	±20	75-125
Ammonia	350.2/350.1[e]	TBD	±20	75-125	30 µg/l.	±20	75-125
Cyanide	9010[c]/320.3[c,d]	TBD	±20	75-125	3.05 µg/l.[e]	±20	75-125
Fluoride (water only)[e]	EPA 300/modified[d,e]	TBD	±20	75-125	19 µg/l.[e]	±20	75-125
Nitrate	EPA 300 modified and 353[e]	1.0 mg/kg	±20	75-125	51 µg/l.	±20	75-125

Table B-2. Analytes of Interest, Analytical Methods, Quantitation Limits, and Precision and Accuracy Guidelines Modified from DOE/RL 1995 (Table 5-7)
(Page 3 of 6)

Analyte	Analytical Method	Target Quantitation Limit Soil[a]	Precision, Soil[b]	Accuracy, Soil[b]	Target Quantitation Limit Water[a]	Precision, Water[b]	Accuracy, Water[b]
Nitrite	EPA 300 modified and 353[d]	1.0 mg/kg	±20	75-125	100 µg/l	±20	75-125
Sulfate	EPA 300	TBD	±20	75-125	150 µg/L	±20	75-125
Tritium (water only)	906.0[d,h]	--	--	--	400 pCi/L	±20	75-125
Americium-241	Am-01[d,i]/Am-02[d]	1 pCi/g	±30	±25	1 pCi/L	±25	±25
Barium-134m (Cesium-137)[m]	D3649 M	0.1 pCi/g	±30	±25	15 pCi/l	±25	±25
Cobalt-60	D3649 M	0.05 pCi/g	±30	±25	25 pCi/l	±25	±25
Curium-244	907.0 M[d,e]/ 907.0[d,h]	1.0 pCi/g	±30	±25	1 pCi/L	±25	±25
Europium-152	D3649 M[d]	0.1 pCi/g	±30	±25	50 pCi/L	±25	±25
Europium-154	D3649 M[d]	0.1 pCi/g	±30	±25	50 pCi/L	±25	±25
Europium-155	D3649 M[d]	0.1 pCi/g	±30	±25	50 pCi/L	±25	±25
Uranium, Total Chemical[d]	TBD	1.0 µg/g	±30	±25	0.1 µg/L	±25	±25
Iodine-129	902.0 M[d,e]/ 902.0[d,h]	2.0 pCi/g	±30	±25	5 pCi/L	±25	±25
Neptunium-237	907.0 M[f]/907.0[d]	1.0 pCi/g	±30	±25	1 pCi/L	±25	±25
Plutonium-238	Pu-02[c,j]/Pu[d,k,l]	1.0 pCi/g	±30	±25	TBD	±25	±25
Plutonium-239/240	Pu-02[c,j]/Pu[d,k,l]	1.0 pCi/g	±30	±25	1 pCi/L	±25	±25
Plutonium-241	Pu-02[c,j]/Pu[d,k,l]	15.0 pCi/g	±30	±25	TBD	±25	±25
Thorium-228	Alpha Spectometry	TBD pCi/g	±30	±25	TBD	±25	±25
Thorium-230	Alpha Spectometry	1.0 pCi/g	±30	±25	TBD	±25	±25
Thorium-232	Alpha Spectometry	1.0 pCi/g	±30	±25	TBD	±25	±25

Table B-2. Analytes of Interest, Analytical Methods, Quantitation Limits, and Precision and Accuracy Guidelines Modified from DOE/RL 1995 (Table 5-7)
(Page 4 of 6)

Analyte	Analytical Method	Target Quantitation Limit Soil[a/]	Precision, Soil[b/]	Accuracy, Soil[b/]	Target Quantitation Limit Water[a/]	Precision, Water[b/]	Accuracy, Water[b/]
Samarium-151	TBD	TBD pCi/g	±30	±25	TBD	±25	±25
Selenium-79	Beta Counting	10.0 pCi/g[e/]	±30	±25	TBD	±25	±25
Uranium-234	U-01[c/]/908.0[d/b/]	TBD pCi/g	±30	±25	1 pCi/l	±25	±25
Uranium-235 (Pa-231)	U-01[c/]/908.0[d/b/]	TBD pCi/g	±30	±25	1 pCi/L	±25	±25
Uranium-236	U-01[c/]/908.0[d/b/]	TBD pCi/g	±30	±25	TBD	±25	±25
Uranium-238	U-01[c/]/908.0[d/b/]	TBD pCi/g	±30	±25	1 pCi/L	±25	±25
Carbon-14 (water only)	C-01[d/b/]	--	--	--	200.0 pCi/l[e/]	±25	±25
Yttrium-90 (Sr-90)[g/]	Sr-02[b/]	1.0 pCi/g	±30	±25	2 pCi/l	±25	±25
Technetium-99	TC-01 M[a/]/ TC-01[d/b/]	15.0 pCi/g	±30	±25	15 pCi/L	±25	±25
Gross alpha	Water 900[b/] Soil 900.0M[f]	10.0 pCi/g	±30	75-125	3pCi/l	±20	75-125
Gross beta	Water 900[b] Soil 900.0 M[f]	15.0 pCi/g	±30	75-125	4 pCi/l	±20	75-125
Soil Physical and Chemical Properties	--	NA	NA	NA	NA	NA	NA
Bulk Density	ASTM D3550-87	•••	•••	•••	--	--	--
Particle Size Distribution	ASTM D133	•••	•••	•••	--	--	--
Moisture Content	ASTM D2216-90	•••	•	•••	--	--	--
$CaCO_3$ Content	ASTM D1373	•••	•••	•••	--	--	--
Saturated Hydraulic Conductivity	ASTM D5084	•••	•••	•••			
Matric Potential and Soil Moisture Retention Curves	ASTM D2325 68, D3152-72	•••	•••	•••	--	--	--
Particle Density	ASTM D854	•••	••	•••	--	--	--

Table B-2. Analytes of Interest, Analytical Methods, Quantitation Limits, and Precision and Accuracy Guidelines Modified from DOE/RL 1995 (Table 5-7)

(Page 5 of 6)

Analyte	Analytical Method	Target Quantitation Limit Soil[a/]	Precision, Soil[b/]	Accuracy, Soil[b/]	Target Quantitation Limit Water[a/]	Precision, Water[b/]	Accuracy, Water[b/]
Cation Exchange Capacity	SW 846 9081	--	--	--	--	--	--
Organic Carbon Content	SW 846 9060	--	--	--	--	--	--
Iron and Manganese Content	--	--	--	--	--	--	--

Table B-2. Analytes of Interest, Analytical Methods, Quantitation Limits, and Precision and Accuracy Guidelines Modified from DOE/RL 1995 (Table 5-7)

Analyte	Analytical Method	Target Quantitation Limit Soil[a/]	Precision, Soil[b/]	Accuracy, Soil[b/]	Target Quantitation Limit Water[a/]	Precision, Water[b/]	Accuracy, Water[b/]
pH and if possible Eh	ASTM G51, 9040/9045[c/]	--	--	--	--	--	--
Mineralogy	--	--	--	--	--	--	--

[a/] Values are to be considered requirements in the absence of known or suspected analytical interferences which may hinder achieving the limit by the analytical laboratory.

[b/] Precision is expressed as relative percent difference; accuracy is expressed as percent recovery. These limits apply to sample results greater than five times the target quantitation limit and are to be considered requirements in the absence of known or suspected analytical interferences which may hinder achieving the limit by the analytical laboratory.

[c/] Methods specified from *Test Methods for Evaluating Solid Waste: Chemical/Physical Methods* (EPA 1990).

[d/] Water analysis.

[e/] Soil analysis.

[f/] Methods specified from *Methods for Chemical Analysis of Water and Wastes* (Kopp and McKee 1983).

[g/] Method is from *Determination of Inorganic Anions in Aqueous and Solid Samples by Ion Chromatography* (Lindahl 1984) and is modified from EPA method 300.0.

[h/] Methods from *Prescribed Procedures for Measurement of Radioactivity in Drinking Water* (Krieger and Whittaker 1980) or an equivalent method.

[i/] Methods, quantitation limits, and target values for precision and accuracy shall be developed in compliance with Westinghouse Hanford or Westinghouse Hanford approved participant contractor or subcontractor procedures.

[j/] 1-butanol and ethyl ether will analyzed as a Tentatively Identified Compounds (TICs) under 8240. Formaldehyde, kerosene, and acetate will be analyzed as TICs under 8270. Tributyl Phosphate will be analyzed using a special calibration under 8270. Additionally, all RCRA TSD waste management unit (excluding the Expansion Ponds) samples will include analyzes for the volatile (8240) and semi-volatile (8270) Tentative Identified Compounds (TICs).

[k/] Applicable methods shall be selected from the *EMI. Procedures Manual* (Volchok and dePlanque 1982) or an equivalent method.

[l/] Parameter measured in the field in compliance with EII 5.8, "Groundwater Sampling."

[m/] The first radionuclide is analyzed in order to derive a concentration for the radionuclide in parentheses.

[n/] Method from Radiochemistry Procedures Manual, Eastern Environmental Radiation Facility (EPA 1987) or an equivalent method.

[o/] Method from Standard Test Method for High-Resolution Gamma-Ray Spectrometry of Water (ASTM 1991) or equivalent method. Soils counted using reproducible geometry, e.g., Marinelli beakers or Petri dishes and standards with sand matrix.

[p/] Modification to Table E-1 (DOE/RL 1995) to be consistent with Table 5-7 or Table 3-2 (DOE/RL 1995) ; Uranium will be analyzed as total chemical uranium. If total uranium exceeds 10 µg/mg individual isotopes will be analyzed.

[q/] ICP 6010 (supertrace) as an alternative method; modification to Table 5-7 (DOE/RL 1995).

[r/] Modification to Table E-1 (DOE/RL 1995).

* Single Operator precision for 2 properly conducted tests should not be considered suspect unless they vary by more than 7.8% of their mean.

** Precision estimates for cohesive soils vary with grain size. No precision estimates cited for non-cohesive soils.

*** ASTM practice does not produce numerical or repeatable data. Therefore, a precision and bias statement is not applicable. ASTM practice does not provide precision and bias statements due to inherent variability of soil.

DRAFT

Table B-4. Sample Type Designation Codes

Sample Type	Sample Type Designation	Purpose of Sample
Chemical	CH	Provide material for chemical and radiological analysis to determine contaminant inventory and extent of contamination in cribs and vadose zone.
Physical	PH	Provide material for determination of physical characteristics of soil and sediment.
Archive	AR	Provide materials for future chemical analysis or physical properties testing. Provides a representative physical record of the lithologies encountered during drilling activities.

Table B-5. Quality Assurance Control Samples

Parameters	Field[a] Samples	Field Duplicate Sample	Field and Equipment Rinsate Blanks	VOA Trip Blank
Soil Physical Properties - Type A[c]	11	1	NA	NA
Soil Physical Properties - Type B[d]	2	1	NA	NA
Soil Chemistry/Rad	13	1	1	TBD
Perched Water Chemistry/Rad	1	1	1	1

[a] Approximate number of field samples.

[c] Type A samples will be run for the following analyses: moisture content, bulk density, particle-size distribution, $CaCO_3$, and pH.

[d] Type B samples will be run for Type A analyses: saturated hydraulic conductivity, cation exchange capacity, moisture retention curves, organic carbon content, unsaturated hydraulic conductivity, and if possible, Eh and mineralogy.

200-BP-11 Source Operable Unit
Unit Managers Meeting
June 19, 1997

Attachment 7

AGENDA

- History
- Status FY 1997 Activities
- Schedule
- Estimated Costs

HISTORY

- *200-BP-11 Operable Unit RFI/CMS and 216-B-3 Main Pond, 216-B-63 Trench, and 216-A-29 Ditch Work/Closure Plan, Volume 1: Facility Investigation and Sampling Strategy*, Draft B, DOE/RL-93-74, issued March 1995. Included:
  - -DQO's
  - -Sampling Strategy
  - -Scope of the Field Investigation
  - -QAPjP

- 200-BP-11 Dispute Resolution, February, 1996
  - -Start 200-BP-11 Characterization in FY 1998 ($500K) Determined by the 200 Area Strategy Workshop
  - -Prepare 200 Area Soil Remediation Strategy

- *200 Areas Soil Remediation Strategy - Environmental Restoration Program*, DOE/RL-96-67, Rev. 0 issued September, 1996
  - -Defined Waste Site Groupings
  - -Defined Assessment Approach and Implementation Steps
  - -Applies Analogous Site Approach
  - -Defines Need for Waste Site Grouping Document

HISTORY (Continued)

- *Waste Site Grouping for 200 Areas Soil Investigations*, DOE/RL-96-81, Rev. 0, issued January, 1997
  - -Establishes Waste Site Group Priorities
  - -Establishes Representative Sites to be Characterized for Each Waste Site Group
  - -Identifies 216-B-2-2 Ditch as a Representative Site for the Gable/B Pond and Ditches Waste Site Group (formerly 200-BP-11)

- Agreement in Principal between the Tri-Parties to Implement the 200 Areas Soil Remediation
  - -Reconfirms need for limited field investigation in 200-BP-11 for FY 98
  - -Defines the 200-BP-11 FY 98 Scope as One Borehole to Groundwater

- Draft Tentative Agreement, 200 Areas Soil Remediation Strategy
  - -Defines that the 200-BP-11 Borehole will be Placed in the 216-B-2-2 Ditch

- Except for the 216-B-2-2 Ditch Borehole, the 200-BP-11 Work/Closure Plan Will Be Superseded by the Gable Mtn/B Pond and Ditches Cooling Water Waste Group LFI Work Plan

STATUS FY 1997 ACTIVITIES

- Preparing 216-B-2-2 Ditch Vadose Zone Borehole Characterization Borehole Description of Work
  - -Proposes One Borehole to Groundwater (235 ft) with Soil Sampling for Chemical and Radiological Analyses, and Physical Properties Testing
  - -Proposed Location at the Head end of the 216-B-2-2 Ditch
  - -Includes a Sampling and Analysis Plan
  - -Sampling Strategy Based on 200-BP-11 Work Plan/Closure Plan and DQO's Applicable to Boreholes to Groundwater.

- Complete Pre-Drilling Planning Activities Following DOW Approval

SCHEDULE

- Transmit 216-B-2-2 Ditch DOW for Concurrent DOE-RL and Regulator Review June 25, 1997
- 10-Day Concurrent DOE-RL and Regulator Review with Comments Received by July 9, 1997
- Finalize DOW and Obtain Ecology Approval by July 16, 1997
- Award Drilling Contract October 2, 1997
- Initiate Drilling mid-November, 1997
- Complete Drilling end-November, 1997
- Receive All Analytical/Testing/Logging Results by January 30, 1998
- Prepare and Transmit 216-B-2-2 Ditch Borehole Summary Report to DOE-RL and Ecology April 30, 1998
- Prepare Gable Mtn/B Pond and Ditches Cooling Water Waste Group (200-CW-1) LFI Work Plan -April 30, 1999 TPA Milestone M-13-20

ESTIMATED COSTS

- DOW: $25K
- Predrilling Planning and Activities: $50K
- Drilling and Waste Managment: $400K
- Borehole Summary Report: $53K

Richard A Carlson

Author: Frank W Gustafson at ~BHI002
Date: 6/18/97 4:29 PM
Priority: Normal
TO: Charlie R Johnson at ~BHI007
TO: Richard A Carlson at ~BHI004
Subject: comments on data management imp guide
---------- Message Contents ----------

Rich/Charlie - below are responses to Teds comments on the data management plan. Please see that he gets a copy of the data management guide as I indicated in comment response #3. (I placed an extra copy on Rich's chair).

Please let me know if you need anything additional.

Frank

---------- Forward Header ----------
Subject: comments on data management imp guide
Author: Ted A Wooley at ~HANFORD02A
Date: 6/9/97 7:37 AM

Here they are.

1) Page 3 table #1 Comment: Table did not transfer well through e-mail, also I don't know what U means (Uranium ?). Please fax or re-send the file.

Based on review of the table, the U that appeared on the table reviewed is likely the checkmarks placed in the boxes in the table (else I need further clarification). The change in the font recognition between the programs running the document and/or used to transfer it may not have recognized the checkmark font and defaulted it to the U.

2) Page 4 sec 2.1.3, para #1 Comment: is the purge water WAC current? If it is currently under revision or will be during the course of the clean up, this should be noted, and the changes considered in the sampling process.

The purge water WAC referenced is from the Sampling and Analysis Plan. The cited WAC is what is currently being used for waste acceptance at the Purgewater facility. If the purgewater criteria changes prior to use by the project, the changes will be identified, evaluated, and discussed with the regulators prior to implementation.

3) Page 6 sec 2.2, Comment: As noted in comment 1 the table part of the file did not transfer well, this makes comparing the table with the text description difficult. After Ecology receives a more readable copy of the table additional comments may or may not be issued.

A copy of the data management guide is attached.

4) Page 7 sec 2.2.4, Comment: Last sentence describes the on-site tracking form. The parenthetical gives examples of percent material. Does this refer to percent by volume of the amount shipped or in the case of metals does it mean percentage of contamination?

The % is based on a field estimate of the volume of each material.

If you have questions please call. tw

300 APT Remedial Action Equipment-Listed Waste Resolution Documentation

- In a letter dated May 15, 1995, Ecology issued a conditional contained-in determination for the 300 Area Process Trenches. 300 Area Process Trenches media disposed in ERDF does not contain a listed waste.

- The 300-FF-1 Sampling and Analysis Plan approved by Ecology addresses handling/disposal of decontamination water generated in the decontamination station.

- The conditional contained-in determination contains no provisions for equipment release after use in the 300 Area Process Trenches. Ecology hereby approves the following approach to decontaminate equipment that is used in the 300 Area Process Trenches:

  Decontamination of all equipment used in the 300 Area Process Trenches will occur in the 300 Area Process Trenches. Thereby all liquid generated during equipment decontamination will remain in the Process Trenches. All equipment parts that have come in contact with Process Trenches media will be washed with a low volume, hot water, pressure washer. Detergents may be used. The equipment will then be radiologically surveyed to verify no contamination exists. If contamination is still present upon completion of the radiological survey, the decontamination process will be repeated. Other methods may be required, such as wiping, scrubbing, and wire brushing of the contaminated surfaces. Upon successful survey release, the equipment will be removed from the Process Trenches for use elsewhere on the project.

Ecology Approval _____ Date _____

Distribution
Unit Manager's Meeting: Remedial Action Unit/Source Operable Units
100, 200, and 300 Areas

Nancy Werdel	DOE-RL, RP (H0-12)
Mike Thompson	DOE-RL, RP (H0-12)
Glenn Goldberg	DOE-RL, RP (H0-12)
Owen Robertson	DOE-RL, RP (H0-12)
Rich Holten	DOE-RL, RP (H0-12)
Bryan Foley	DOE-RL, RP (H0-12)
Robert McLeod	DOE-RL-RP (H0-12)
Ellen Mattlin	DOE-RL, EAP (A5-15)
Steve Balone	DOE-RL, RPS (H0-12)
Lisa Treichel	DOE-HQ (EM-442)
Rich Person	DOE-HQ (EM-442)
Dennis Faulk	100 Aggregate Area Manager, EPA (B5-01)
David Einan	EPA (B5-01)
Larry Gadbois	EPA (B5-01)
Phil Staats	100 Aggregate Area Manager, WDOE (B5-18)
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David Holland	WDOE (Kennewick) (B5-18)
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T. M. Wintczak	BHI (H0-11)

Please inform Tamen Rodriguez (372-9562) - BHI
of deletions or additions to the distribution list. Attachment #1