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June 19, 1991

Meeting Minutes Transmittal/Approval
 Unit Managers Meeting: Past Practices - General Topics
 450 Hills St., Room 47
 Richland, Washington
 April 16, 1991

From/ Appvl.: Robert K. Stewart Date: 6/19/91
 Robert K. Stewart, R.I. Coordinator, DOE-RL (A6-95)

Appvl.: Dave R. Sherwood Date: 19 Jun 91
 Douglas R. Sherwood, Representative, EPA (B5-01)

Appvl.: Larry Goldstein Date: JUNE 19, 1991
 Larry Goldstein, CERCLA Unit Supervisor, Washington Dept. of Ecology

The purpose of this meeting was to discuss general topics which are common to all past practices operable units.

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

- Attachment #1 - Summary of Meeting and Commitments and Agreements
- Attachment #2 - Agenda for the Meeting
- Attachment #3 - Attendance List
- Attachment #4 - Commitments/Agreements Status List
- Attachment #5 - Briefing on Cleanup Standards Amendments to the Model Toxics Control Act Cleanup Regulation
- Attachment #6 - Program Integration - Within the WHC Environmental Restoration and Remedial Action Program
- Attachment #7 - Hanford Underground Storage Tank Program
- Attachment #8 - Announcement - Environmental Remediation '91

Prepared by: Doug Farrell Date: 6/19/91
 SWEC GSSC

Concurrence by: J.M. Wintz Date: 6/19/91
 WHC ER Programs



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General Topics Unit Managers Meeting

Distribution:

Dave Einan, EPA (B5-01)
 Pam Innis, EPA (B5-01)
 Doug Sherwood, EPA (B5-01)
 Dan Duncan, EPA, Region 10, RCRA
 Chuck Cline, WDOE (two copies)
 Dave Nylander, WDOE (Kennewick)
 R.O. Patt, Oregon Water Resources Dept.
 Ward Staubitz, USGS
 Donna Lacombe, PRC
 Doug Fassett, SWEC (A4-35)
 C.E. Clark, DOE-RL (A6-95)
 D.L. Clark, DOE-RL (A5-55)
 Julie Erickson, DOE-RL (A6-95)
 R.D. Freeberg, DOE-RL (A5-19)
 R.E. Gerton, DOE-RL (A4-02)
 Jim Goodenough, DOE-RL (A6-95)
 Elizabeth A. Bracken, DOE-RL (A5-19)
 Mary Harmon, DOE-HQ (EM-442)
 Paul Pak, DOE-RL (A6-95)
 Jim Rasmussen, DOE-RL (A6-95)
 Bob Stewart, DOE-RL (A6-95)
 Mike Thompson, DOE-RL (A6-95)
 S.H. Wisness, DOE-RL (A6-95)
 J.M. Hennig, DOE-RL (A5-21)
 John Stewart, USACE
 Melvin Adams, WHC (H4-55)
 Frank Calapristi, WHC (B2-35)
 Steve Clark, WHC (H4-55)
 Larry Hulstrom WHC (H4-55)
 Wayne Johnson, WHC (H4-55)
 Alan Krug, WHC (H4-55)
 Merl Lauterbach, WHC (H4-55)
 Tim Veneziano, WHC (B2-35)
 Fred Roeck, WHC (H4-55)
 Jim Patterson, WHC (B2-15)
 Steve Weiss, WHC (H4-55)
 Tom Wintczak, WHC (L4-92)
 R.D. Wojtasek, WHC (L4-92)
 Don Kane, EMO (K1-74)
 Terri Stewart, PNL (K2-12)
 Michael A. Neely, PNL (K6-96)

ADMINISTRATIVE RECORDS: 110()-EM-1, 300-FF-1, 300-FF-5, 200-BP-1, 200-UP-2,
 100-HR-1, 100-HR-3, 100-BC-1, 100-BC-5, 100-NR-1, 100-NR-3, 100-FR-1; Care of
 Susan Wray, WHC (H4-22)

Please inform Doug Fassett (SWEC) of deletions or additions to the distribution list.

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Attachment #1

Summary of Meeting and Commitments and Agreements

General Topics Unit Managers Meeting
April 16, 1991

Approval of March's Unit Managers Meeting Minutes

1. The Meeting Minutes from the March Unit Managers Meetings were distributed for signature. There were no comments on the draft minutes which were previously distributed.

Ace Transition

2. Progress in the transition of responsibilities from WHC (Westinghouse) to the Corps (USACE) was described. John Stewart (USACE) said Wendel Greenwald (USACE) has continued to work closely with Steve Clark (WHC) on the 1100-EM-1 Operable Unit. A second individual from the Corps is expected to be on site by April 19. This person will be working with Steve Clark on the RI Phase II Work Plan Supplement and the Feasibility Study Phase I and II Reports. The Corps has also been involved in discussions on the Aggregate Area Management Study. By September 30 the Corps will have complete responsibility for 1100-EM-1. The Corps should be actively involved in the monitoring well survey work if they receive the task order by April 19.

Investigation Derived Waste

3. Bob Stewart (DOE-RL) and Kathy Davis (SWEC) provided a brief update on the progress on completing EII 4.3 for investigation derived waste. Mr. Stewart said DOE has developed responses to the regulatory comments on draft EII 4.3. The Draft Response Comments were provided to EPA and Ecology at this meeting by Kathy Davis. Bob Stewart said there was difficulty in developing a procedure that would apply to RCRA, CERCLA and the Past Practice sites.

Action Item #GT.103: A meeting date is to be arranged for the Technical Task Team, including EPA and Ecology, to discuss the draft-response comments on EII 4.3 "Investigation Derived Waste". Action: Bob Stewart

Performance Assessment Task Team - This presentation was not given as scheduled due to ongoing changes in the performance assessment.

Procedures for Handling Official Correspondence

4. Jim Goodenough (DOE-RL) announced a new procedure that DOE-RL will be using to handle official Hanford correspondence. He said regulatory letters will now be given to DOE-RL Correspondence Control to ensure that the correspondence will be placed in the official DOE record. This procedure will allow upper DOE-RL management the opportunity to review

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official correspondence that is delivered by the regulators at the UMMs. Doug Sherwood (EPA) pointed out that all official correspondence should also be sent to the Administrative Record.

5. Doug Sherwood suggested that the Administrative Record be part of the normal distribution of all correspondence and that the unit managers make sure that all correspondence gets into the Administrative Record. Jim Goodenough said people were trained fairly well that correspondence related to the Tri Party Agreement would be put into the Administrative Record.

Model Toxic Control Act

6. Dave Bradley (Ecology) gave a presentation on the Model Toxic Control Act and its applicability to the Hanford Site. The handout used in the presentation is included as Attachment #5. The Model Toxics Control Act Cleanup Regulation, Chapter 173-340 WAC (February 28, 1991) was distributed, but is not attached. Mr. Bradley said susceptible sub groups such as children and future generations are considered when applying regulations to a site. The first step at a hazardous waste site is to define reasonable maximum exposure, establish clean up levels, and establish points of compliance. Then the clean up action is selected. Clean up actions need to satisfy clean up standards and include long term monitoring. He said the investigation process at "industrial" sites was similar to other sites, but the risk assessments may differ. Rich Hibbard (Ecology) didn't think Hanford would be an industrial site since industrial sites are centered in areas of high industrial activity. Mr. Hibbard said the 200 Area might be a "commercial" site rather than an industrial site. He said the "industrial" designation is based on current use and possible future use of the land. Dave Bradley said Ecology acknowledges that there are acceptable levels above natural background that still protect human health and the environment. He said Ecology will not require cleanups below natural background levels. Mr. Bradley said the point of compliance should be as close as possible to the waste unit boundary. He said cleanup of soil is generally required to extend to a depth of 15 feet when there is a risk of direct human contact.
7. Mr. Hibbard said Ecology is in the process of meshing WAC 173-303 and WAC 173-340 to develop health based levels for cleanups at RCRA sites and to combine RCRA and CERCLA regulations on cleanups. This guidance is expected to be available in about November 1991. Dave Bradley said the consideration of cost in the process of identifying the preferred remedial action at RCRA and CERCLA sites will be addressed by future Ecology guidance. One possibility is that actions that cost five or more times what containment would cost are substantial and disproportionate. Guidance on cost criteria will be available this summer. Other guidance will result from studies on the correlation of TCLP (Toxicity Characteristic Leaching Procedure) sample analysis results with other sample analysis results. This guidance is expected to be available in about June or July 1991. Mr. Bradley said a first

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draft of guidance on the control of radioactive contaminants is expected to be completed in early 1992. Ecology will be providing training to various groups on MTCA for the next six months.

Program Integration

8. Ken Jordan (WHC) gave a presentation on program integration (see Attachment #6). The Environmental Restoration and Remediation Program was described. Work Breakdown Structure was defined as elements of a program that are well understood and can be given a schedule. Work Breakdown Structure was described for the Environmental Restoration and Remediation Program. Individual cost accounts range from several million dollars to about \$100,000. An auditable work authorization process is used to meet congressional requirements.

Action Item #GT.104: A presentation on inter-program coordination between the Waste Management Division and the Environmental Restoration Division is to be given. Ecology requests that information on management decision making, data management, field work and cross-program communication between ERD and WMD be included. Specific examples include: 1) decontamination and decommissioning of the reactors; 2) surface radiation reduction; 3) RCRA-site activities; and, 4) reactor operations (mulberry trees). The objective is to assure the regulators that these activities are being conducted in accordance with federal and state law, the TPA and any ongoing or planned past practice work. Action: Jim Patterson

Hanford Site Underground Storage Tank Program Integration

9. Mike Mihalic (WHC) gave a presentation on the Hanford Underground Storage Tank (UST) Program (see Attachment #7). All types of wastes, except radioactive waste, are included in the program. WAC 173-360 has now been implemented for USTs. There are currently 58 tanks regulated by the Program. He said 31 tanks had been removed and 5 of those had leaked. The tanks that are removed are decontaminated and scrapped. If the contamination extends at least five feet below the leaking tank, then the contaminated soil is removed. Two of the five UST release sites are still open. The WAC regulations generally describe what information is required for tank closure. The UST Program will fund the removal of orphan tanks if a responsible DOE program cannot be identified. Additional funds have been requested to remove additional tanks. Julie Erickson said the UST implementation plan would be completed by the end of April.
10. Essentially all regulated tanks are in operable units. If the tank is in an inactive operable unit, WHC notifies the unit manager prior to removal. If the tank is not leaking, no further action is taken after the removal and the site investigation. If a leaking tank is in an "inactive" operable unit, WHC coordinates remediation with the unit manager, Ecology and EPA. If a tank is in an active operable unit, the unit manager is first notified and the removal is coordinated with

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Ecology and EPA. At active operable units with no release, no further action is taken after the site investigation. At release sites at active operable units, remediation of the leak is included as part of the RI/FS and clean up of the operable unit. There are currently no tanks scheduled for removal in active operable units. Bob Stewart (EPA) suggested that a change request be used if a tank which requires removal is discovered in an active operable unit. Doug Sherwood (EPA) was assured that information on the tanks that have been removed was sent to the Administrative Record. Larry Goldstein (Ecology) said actions that take place under WAC 173-360 regulations should be brought to the attention of State regulators. In response to a question by Mr. Goldstein on tightness testing, Mr. Mihalic said that orphan (non-regulated) tanks are not so tested.

Action Item #GT.105: The regulators are to be formally notified and provided with documentation on the 31 underground storage tanks that have been removed. Action: Jim Patterson

Action Item #GT.106: Provide the Underground Storage Tank implementation plan to Ecology by the next UMMs on May 14 and 15. Copies of the document are to be provided to the Ecology offices in Olympia and Kennewick. The Ecology UST oversight is provided by Ecology's office. Action: Paul Pak

Field Screening Lab

11. Tim Moody (WHC) gave a presentation on the proposed field screening laboratory. A handout of the overheads used in the presentation was not provided due to the sensitive nature of solicitation for bids. The purpose of the lab would be to offset the number of samples that are sent to Contract Laboratory Program (CLP) certified labs for analysis. In addition, holding time criteria and sample results turnaround times would be more easily met. However, it is expected that ten percent of the samples would still have to be sent to CLP labs for confirmation of field lab results. Significant time and cost savings are expected. Samples greater than ten millirem per hour would go to the hot lab for greater characterization before they are sent to the mobile lab. Electroconductivity, pH, CO₂ and carbon analysis would be done. X-ray florescence would be used for metals analysis. IC analysis would be used for ions, cations and cyanide. A small GC setup would be used for aromatics, halogenated compounds and hydrocarbons after supercritical fluid extraction. A gas chromatograph/mass spectrometer would be used for analysis of volatile organics. Up to 20 samples per day could be analyzed. Mr. Moody believes data packages could be available 24 hours after being submitted to the field lab. Typical sample analysis is expected to cost \$11 million per year.
12. The average cost for sample analysis at standard labs is about \$2,500 per sample. Screening with the mobile laboratory would cost about \$70 per sample; if 10% CLP confirmation is added the cost would be about \$325 per sample. The mobil lab would cost \$309,042 per year or about

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\$1,430,000 per year with 10% of the samples being analyzed through CLP. The RFP request was made March 11 and the deadline for responses is April 18th. The lab is expected to be available by January 1992. Mr. Moody said the 300-FF-1 and FF-5 work plans have incorporated a mobil screening facility.

Announcements

13. John Stewart (USACE) announced that he would not be on cc:mail for the foreseeable future. However, material may be sent to him at his office in the Richland Federal Building at mail stop number AO-87.
14. Jim Goodenough (DOE) informed the attendees at the UMM that Hanford personnel would be making presentations at Environmental Remediation '91. The seminar is scheduled for September 8-11, 1991, at the Red Lion Inn in Pasco, Washington. Attachment #8 provides additional information.

UMM Meeting Schedule

15. The UMM meeting schedule was reviewed and extended.
May 14 and 15
June 19 and 20
July 17 and 18
Aug. 14 and 15

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Attachment #2

Agenda

**General Topics Unit Managers Meeting
April 16, 1991**

9:00 - 9:30

Approval of March's Unit Managers Meeting Minutes - Doug Fassett

ACE Transition - Bob Stewart/John Stewart, ACE

Investigation Derived Waste - Kathy Davis

Performance Assessment Task Team - Merl Lauterbach

Procedures for Handling Official Correspondence - Jim Goodenough

9:30 - 10:30

Model Toxic Control Act - Dave Bradley, Ecology

10:30 - 11:00

Program Integration - Ken Jordan

11:00 - 11:30

Hanford Site Underground Storage Tank Program Integration - Mike Mihalic

11:30 - 12:00

Field Screening Lab - Tim Moody

12:00 - 12:45

Lunch

12:45 - 1:15

Action Item Status - Doug Fassett

May Unit Managers Meeting Agenda - Bob Stewart

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Attachment #3

Attendance List

General Topics Unit Managers Meeting
April 16, 1991

Name	Org.	O.U. Role	Phone
Allender, Robert	B&C	Ecology Support	(503) 244-7005
Erickson, Julie	DOE-RL	Unit Manager	(509) 376-0496
Pak, Paul	DOE-RL	100-NR	(509) 376-4798
Stewart, Robert K.	DOE-RL	RI Coord.	(509) 376-6192
Thompson, K. Michael	DOE-RL	ER Program	(509) 376-6421
Willison, Patrick	DOE-OCC		(509) 376-2028
Werdel, Nancy	DOE-RL/ERD		(509) 376-5500
Bradley, Dave	Ecology		(206) 438-3026
Cline, Chuck	Ecology	Hydrogeology	(206) 438-7556
Cross, Steve	Ecology	CERCLA Unit	(206) 459-6675
Goldstein, Larry	Ecology	Unit Manager	(206) 438-7018
Hibbard, Richard	Ecology	1100-EM-1	(206) 493-9367
Nylander, Dave	Ecology	Kenn. Off. Man.	(509) 546-2992
Einan, David	EPA	Unit Manager	(509) 376-3883
Innis, Pamela	EPA	Unit Manager	(509) 376-5466
Sherwood, Doug	EPA	Unit Manager	(509) 376-9529
Shuster, Jerry	PRC	EPA Cont.	(206) 624-2692
Clyde Moore	Parametrix	WDOE Support	(206) 455-2550
Davis, Kathy	SWEC	GSSC to DOE-RL	(509) 376-0412
Erickson, Kirth	SWEC	GSSC to DOE-RL	(509) 376-8189
Fassett, Doug	SWEC	GSSC to DOE-RL	(509) 376-3136
Floodstrom, Jennifer	SWEC	GSSC to DOE-RL	(509) 376-0309
Fryer, Bill	SWEC	GSSC to DOE-RL	(509) 376-9707
Gasser, Mike	SWEC	GSSC to DOE-RL	(509) 376-0969
King, Joe	SWEC	GSSC to DOE-RL	(509) 376-4726
Foote, Alden	USACE	Tech. Branch	(509) 522-6870
Stewart, John	USACE	Project Manager	(509) 376-9201
Drost, Brian	USGS	EPA Support	(206) 593-6510
Staubitz, Ward	USGS	EPA Support	(206) 593-6510
Carlson, R.A.	WHC	200/300, Env. Eng.	(509) 376-9027
Downey, H.D.	WHC	ER Program	(509) 376-5539
Henckel, R.P.	WHC	Env. Eng.	(509) 376-2091
Knepp, Anthony	WHC	Hydrology	(509) 376-3398
Krug, A.D.	WHC	OU Coordinator	(509) 376-5634
N.M. Naiknimbalkar	WHC	Coordinator	(509) 376-8739
Patterson, Jim	WHC	ER Program	(509) 376-0568
Smith, E.H.	WHC		(509) 376-0234

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Attachment #4

Action Items Status List

General Topics Unit Managers Meeting
April 16, 1991

Item No.	Action/Source of Action	Status
GT.31	DOE/WHC is to develop an implementation plan for the strategy associated with the logic diagram on source/groundwater operable unit integration and streamlining. This plan is to include schedule and budget impacts associated with implementation. Action: K.M. Thompson, (3/20/90, GT-UMM)	Open <i>The revised TPA change package will provide provisions to finalize the strategy document by the end of June. The work plans presently under review will be modified to reflect a new, more streamlined investigation approach. The 200 area will undergo "aggregate area studies" before the work plans are written. For details see the forthcoming change package, available sometime the week of April 22, 1991 (5/16/91).</i>
GT.38	If possible, at the May Unit Managers Meeting a presentation on the approved, preferred alternative method for disposal of the reactors will be given. Action: Jim Goodenough (4/18/90, GT-UMM)	Open The final EIS was forwarded to EH-1 on 2/7/91 for final approval (2/20/91). The EIS will be reviewed by Admiral Watkin's office and Nuclear Safety (4/16/91).
GT.38A	The presentation per Action Item #GT.38 is to include discussion on how NEPA compliance, land use, and the final disposition of the reactors is being addressed by DOE. (10/16/90, GT.UMM)	Closed (4/16/91) One piece removal of the reactors is proposed; land use needs to be addressed (2/20/91).
GT.43	A follow-up meeting will be scheduled with EPA, Ecology, DOE and WHC to discuss the apparent conflicts between NEPA and RCRA/CERCLA activities. Action: Julie Erickson/Paul Dunigan (4/18/90, GT-UMM)	Open Headquarters is working on draft guidance for the EA and Phase III Feasibility Study to be incorporated into one document. Julie Erickson will set up a meeting when guidance has been received (10/16/90).

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- GT.63 WHC is to draft a letter for DOE to send to EPA and Ecology proposing to treat the 200-UP-2/200W Area and the Associated Groundwater contamination as an Aggregate Area Management Study (AAMS). Action: Julie Erickson (8/15/90, GT.UMM)
- GT.68 A training plan on the Quality Assurance Requirements Document (QARD) will be developed and shared with the regulators for their review. Action: Ron Cote' (and H. Downey) (9/19/90 GT.UMM)
- GT.70 Discuss the prioritization and preparation of operable unit work plans. Link this to the streamlining strategy and include it as a topic for the next UMM. Action: Larry Goldstein and Doug Sherwood (10/16/90, GT.UMM)
- GT.71 Provide the ENCORE project plan and copies of all deliverables to EPA and Ecology. Action: Nancy Werdel (10/16/90, GT.UMM)
- Open
The letter has been transmitted to DOE. TPA changes are being proposed (12/17/90). A final strategy is delayed pending the development of an overall direction by ER for implementation (1/23/91). The final letter will be sent to EPA and Ecology by May 15 (4/16/91).
- Open
The development of the plan is being expedited (11/14/90). A draft of the plan has been completed and is in review. A presentation is planned for the May UMM (4/16/91).
- Closed
No decision will be reached prior to Ecology's receipt of the change order package. A better understanding of the schedules of soon to be approved work plans is needed by Ecology (1/23/91). It is imperative to EPA that prioritization be discussed before a plan is implemented by DOE. EPA suggested a meeting be arranged (2/20/91). Completed by the April 8th letter to John Wagoner from Christine Gregoire and Dana Rassmussen (4/16/91).
- Open
The project managers received a presentation by Jack Waite (11/14/90). The project plan has not yet been delivered to the regulators (1/23/91).

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- GT.72 WHC will set up a meeting to coordinate RDDT&E supported and operable unit specific performance assessment (PA) activities, and assess the direction of the activities. Action: Jim Patterson (11/14/90)
- GT.74 Provide the proposal to the regulators to improve comment/disposition resolution process on documents. Action: Bob Stewart, Tom Wintczak, John Stewart (11/14/90)
- GT.76 Ecology and EPA are to provide comments on the revised EII's 4.2 and 5.4 related to the handling of drilling decontamination fluids. Action: Larry Goldstein, Doug Sherwood (11/14/90)
- GT.77 DOE is to prepare a proposal for the handling of existing drums of decontamination rinsate. Action: Hal Downey (11/14/90)
- GT.85 Assign a lead to develop an agenda/attendance list for a scoping meeting to address the operable unit prioritization and the work plan review procedure. Action: Doug Sherwood (12/18/90)
- Open
WHC and DOE are developing a position in response to the EPA report. A separate meeting will be set up with EPA in April to discuss their concerns. The decision to present information at the Unit Managers meeting will be made at that time (3/27/91). Meetings with EPA are ongoing (4/16/91).
- Open
A draft proposal has been prepared. The document is in internal review and will be transmitted to the regulators when the review is complete (12/17/90). On hold (4/16/91).
- Open
Comments on the document were received from Ecology on 1/10/90. A draft response was provided to Ecology on 1/23/91. A final response is under development by a task group for DOE (1/23/91). The final DOE response to the regulators will not be issued until receipt of the EPA response (2/16/91).
- Open
No change in status (3/20/91).
- Open
Awaiting implementation of the strategy. To be done in May (3/20/91).

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- GT.87 (HRI.24): Check into reviewing the QA requirements document (QARD) to be issued to EPA and Ecology. Action: J. D. Goodenough (and Nancy Werdel) (8/16/90, HRI-UMM)
- GT.88 Provide a report at the February UMM on the application of the newly identified safety requirements to past practice activities. Specifically, address how the requirements will apply to approved RI/FS and IRA activities, and how existing and forthcoming work plans need to be revised. Action: T. Wintczak, M. Lauterbach, R. Carlson (1/23/91)
- GT.89 Provide Ecology and EPA with a schedule for completing photogrammetric and surveying requirements necessary to develop the 100 Areas Base Map. These requirements include: 1) Aerial photography; 2) ground proofing; 3) converting historical and new data to Lambert Coordinates; and, 4) digitizing historical and new data for use in a G.I.S. system. Action: Bob Henckel (1/23/91)
- GT.91 Set up a meeting between EPA, WHC, Ecology and DOE on how the determination is made to include certain data in HEIS and on what data validation entails. Action: Bob Henckel, Julie Erickson (1/23/91)
- Open
The QARD was issued on March 18, 1991 (3/27/91). The QARD has not yet been received by EPA and Ecology (4/16/91).
- Open
EPA expects a letter from DOE which indicates how the schedules for the operable units will be affected (2/20/91). A letter is being prepared and will be issued to DOE by Mid-April 1991 (3/27/91). The package that will be sent to EPA is expected to be sent the week of April 15 (4/16/91).
- Closed (4/16/91)
Funding for mapping activities will be evaluated at mid-year review and a schedule will be laid out for Hanford mapping work that is not specific to each OU. Surveying of existing wells within each OU will be funded by that OU (3/27/91). All fly over maps are in and have been accepted by Kaiser. The 200 Area drawing upgrades for HEIS are expected to be completed about mid July, the 100 Area should be completed about mid August, and the 300 Areas should be completed by year end. The goal is to have all base maps ready at the end of this fiscal year (4/16/91).
- Open
The meeting date depends on the availability of EPA (4/16/91).

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- GT.93A The issue of English vs. metric units is to be presented to the Data Administration Council and possibly the DOE site data council. Action: B. Henckel (2/20/91)
- GT.93B The issue of English vs. metric is to be discussed with Mel Adams (WHC) and the personnel working on the guidance documents to determine how the units used can be standardized from one document to the next. Action: J. Patterson (2/20/91)
- GT.95 Arrange a briefing on the site surveying task and Kaiser's progress in developing technical requirements for the surveying. Action: K.M. Thompson (2/20/91)
- GT.96 Provide D. Einan (EPA) and Ecology with a controlled copy of the OSM procedures. Action: J. Erickson, J. Kessner (3FF1, 2/21/91)
- Closed (4/16/91)
The Data Administrative Council is in the process of developing data standards for WHC and site-wide data standards in conjunction with the site-wide council (4/16/91).
- Closed (4/16/91)
Work plan guidance documents will specify the use of both English and metric in future work plans (2/27/91).
- Open
If the task order to perform the surveying is received, the Corps will give a presentation at the May UMM (4/16/91). ACE & KEH are to discuss ACE's comments on KEH's draft scope of work they prepared for DOE. The DOW details ACE requirements for the surveying (accuracy, precision, QA, etc.). After agreement is reached and an internal review completed, the draft SOW will be transmitted to the regulatory community for comment before the SOW is completed. The expected time frame is June (4/16/91).
- Closed
The manual was hand delivered to Dave Einan in April before the UMM and was mailed to Ecology the same day (5/15/91).

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- GT.97 Ecology is to respond to the letter from L. Hulstrom which requests a determination on whether or not Enduraseal is designated a hazardous substance. The Enduraseal is being considered for use on the roads to the 300 Area process trenches and on other areas. Action: L. Goldstein (3FF1, 2/21/91)
- Open Ecology is to provide an update at the May UMM (4/16/91). Ecology informed Bob Stewart in May that Enduraseal is not a hazardous substance. However, Ecology is suggesting a long-term study to determine the effectiveness of Enduraseal at the Hanford site.
- GT.98 Track the progress of informing the DOE computer people that Ecology needs to be connected to HLAN and cc: mail (2/20/91). Action: Nancy Werdel (4/16/91)
- Open Nancy Werdel was informed and she will follow up (4/16/91).
- GT.99 When it is known that important policy items (e.g., Aggregate Area Management Strategy for 100 Area) will be addressed at an operable unit managers meeting, note it on the agenda when it is sent out. Action: Jim Patterson (3/20/91)
- Closed (4/16/91) Unit Coordinators are to inform Jim Patterson when major or site wide issues will be addressed at specific operable unit meetings so the issues can be placed on the agenda (4/16/91).
- GT.100 Ecology, EPA, USACE will review the Expedited Response Action prioritization document and provide comments in the next one-two weeks. Action: Ecology, EPA, USACE (3/20/91)
- Open USACE provided comments to Wayne Johnson (WHC) (4/16/91).
- GT.101 Clarify the funding question for fiscal year (FY) '92 and '93 regarding the Expedited Response Actions. Action: Tom Wintczak (3/20/91)
- Open Funding in FY '92 and '93 is still being discussed at DOE-HQ. Doug Sherwood said having money was part of an acceptable change package, but not having money is not part of an acceptable change package (4/16/91).
- GT.102 Ecology will make a presentation at the April Unit Managers Meeting on the Model Toxics Control Act (MTCA) and its application to the Hanford Site. Action: Rich Hibbard (3/20/91)
- Closed (4/16/91)

- 9 1 1 2 2 0 7 1 6 0 8
- GT.103 A meeting date is to be arranged for the Technical Task Team, including EPA and Ecology, to discuss the draft-response comments on EII 4.3 "Investigation Derived Waste". Action: Bob Stewart (4/16/91) Open
- GT.104 A presentation on inter-program coordination between the Waste Management Division and the Environmental Restoration Division is to be given. Ecology requests that information on management decision making, data management, field work and cross-program communication between ERD and WMD be included. Specific examples include: 1) decontamination and decommissioning of the reactors; 2) surface radiation reduction; 3) RCRA-site activities; and, 4) reactor operations (mulberry trees). The objective is to assure the regulators that these activities are being conducted in accordance with federal and state law, the TPA and any ongoing or planned past practice work. Action: Ken Jordan (4/16/91) Open
- GT.105 The regulators are to be formally notified and provided with documentation on the 31 underground storage tanks that have been removed. Also, it will be indicated that documentation on the removals has been put in the Administrative Record. Action: Jim Patterson (4/16/91) Open

GT.106 Provide the Underground Storage Open
Tank implementation plan to
Ecology by the next UMMs on May
14 and 15. Copies of the
document are to be provided to
the Ecology offices in Olympia
and Kennewick. The Ecology UST
oversight is provided by
Kennewick. Action: Paul Pak
(4/16/91)

91122071609

Briefing

on

Cleanup Standards Amendments

to the

**Model Toxics Control Act Cleanup Regulation
(Chapter 173-340 WAC)**

April 16, 1991

Information Contacts:

- Carol Fleskes, Toxics Cleanup Program Manager (438-3007)
- Pete Kmet, Policy and Technical Support Section (438-3010)
- Dave Bradley, Technical Policy Unit (438-3026)
- Elena Guilfoil, Technical Policy Unit (438-3012)
- Lon Kissinger, Technical Policy Unit (438-3020)

91122001610

Briefing Topics

- Summarize statutory requirements
- Provide overview on rule development process
- Describe key provisions of the cleanup standards
- Identify ongoing guidance development efforts

Regulatory Dilemma

- **Broad statutory mandates**
 - **Protect human health and environment**
 - **Err on the side of safety**
 - **Command to act**

- **Conclusive scientific evidence rarely available**
 - **Frontiers of scientific knowledge**

- **Politics of cleanup**
 - **High expectations**
 - **Diverse perceptions**
 - **Economic impacts**

91122001512

Model Toxics Control Act Cleanup Regulation

Phase 1: Process Regulation

- **Rule adoption** April 1989
- **Rule effective** May 1989⁹⁰

PHASE 2: Cleanup Standards Amendments

- **Public review draft and meetings** March 1990
- **Amendments published in State Register** August 1990
- **Public meetings and hearings** August and September 1990
- **Close of public comment period** September 1990
- **Rule adoption** February 1991

91122001613

MTCA Statutory Requirements

- Cleanup standards must
 - Protect health and the environment
 - Be at least as stringent as:
 - ▲ Section 121 of CERCLA
 - ▲ Other applicable state and federal laws
- Declaration of policy
 - Individual right to healthful environment
 - Protection of future generations
- Cleanup actions must
 - Satisfy cleanup standards
 - Be permanent to the maximum extent practicable
 - Include long-term monitoring

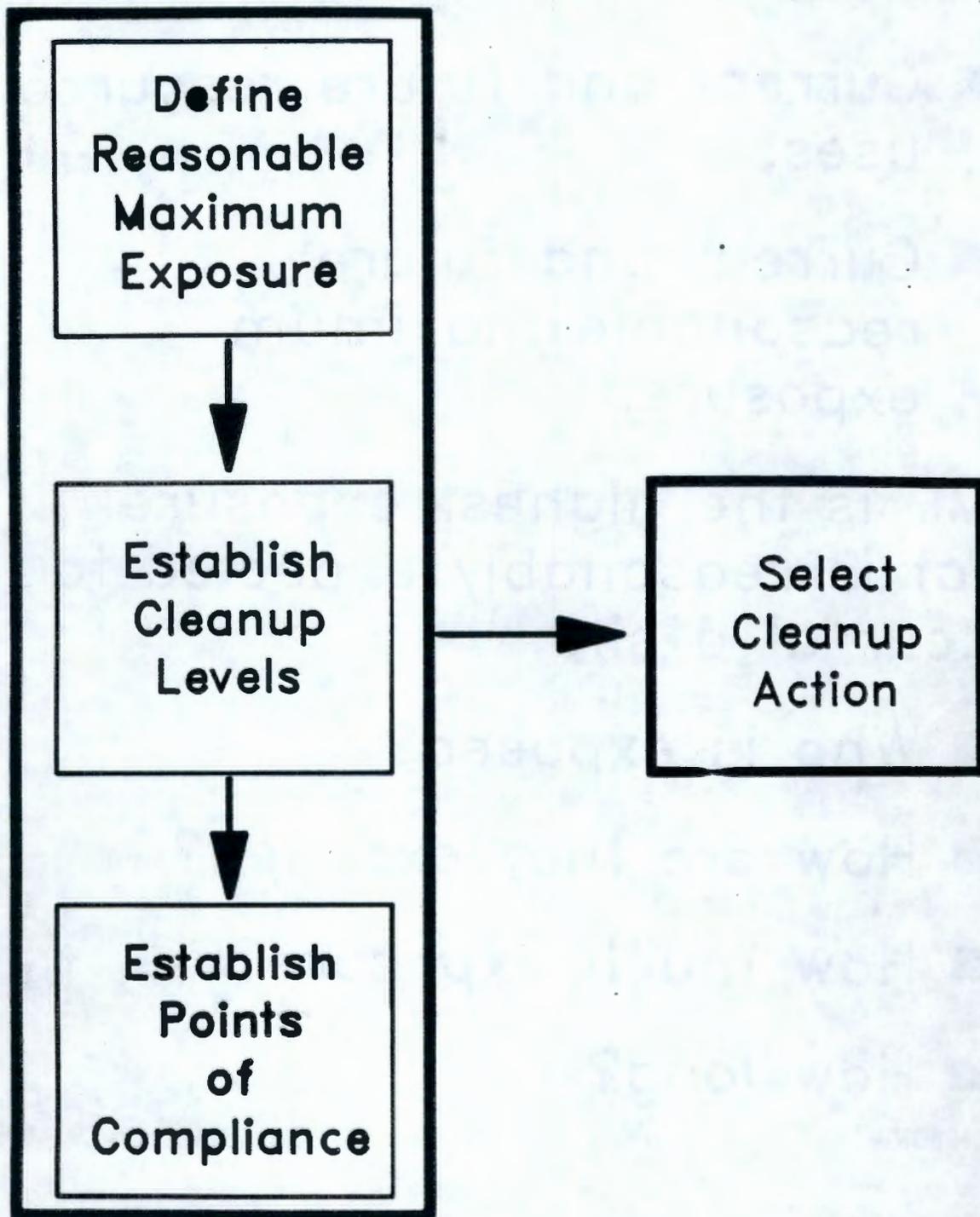
91122001614

REGULATION DEVELOPMENT

- Work Groups
 - Cleanup Standards Work Group
 - Cleanup Process Work Group
 - Ecology Cleanup Levels Task Force
- Science Advisory Board
- Public Involvement
 - Fact Sheets
 - Public workshops/meetings
 - Public hearings
 - Responsiveness Summary
- Environmental Impact Statement

91122001615

CLEANUP STANDARDS AND SELECTION OF CLEANUP ACTION



91122071516

REASONABLE MAXIMUM EXPOSURE (RME)

Cleanup levels are based upon:

- Current and future resource uses;
- Current and future reasonable maximum exposure.

RME is the highest exposure that is reasonably expected to occur at a site:

- Who is exposed?
- How are they exposed?
- How much exposure?
- How long?

9112201617

REASONABLE MAXIMUM EXPOSURE (RME)

- Regulation specifies:
 - RME scenarios that are generally applicable to all sites;
 - Criteria for demonstrating that such RME scenarios are not appropriate to specific sites.

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REASONABLE MAXIMUM EXPOSURE GROUND WATER

- Drinking water and other domestic uses represents RME.
- Ground water cleanup levels shall be consistent with this use unless:
 - Ground water is not a current source of drinking water;
 - Ground water is not a potential future source of drinking water;
 - No likelihood of migration to current or future sources of drinking water.
- Ground water cleanup levels shall not cause violations of cleanup levels in other media.

GROUND WATER
Potential Future Source of
Drinking Water

- **Sustainable yield is greater than 0.5 gpm**
- **Total dissolved solids are less than 10,000 mg/l**
- **Recovery is technically possible**

91122071520

REASONABLE MAXIMUM EXPOSURE (RME) SOIL

- Residential site use presumed to represent reasonable maximum exposure.
- Soil cleanup level shall be consistent with this use unless:
 - Site not current residential area;
 - Site does not have potential to serve as a residential area in future;
 - Site use restrictions.
- Soil cleanup levels for industrial sites established under WAC 173-340-745.

91122001621

RME - Soils

Criteria for basing soil cleanup levels on industrial site use include:

- **Zoned or otherwise officially designated for industrial purposes**
- **Currently used for industrial purposes or history of use**
- **Adjacent properties used or designated for industrial uses**
- **Site is expected to be used for industrial purposes**
- **Cleanup action provides for institutional controls**

Commercial sites

- **Not addressed under industrial site category**
- **Rule provides criteria**

Agricultural sites

- **Defined on site-specific basis**

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CLEANUP LEVELS

Three approaches:

Method A — Tables

Method B — Standard

Method C — Conditional

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CLEANUP LEVELS

Method A

Used at the following types of sites:

- Routine cleanup action;
- Numerical standards available for all hazardous substances.

Cleanup levels must be as stringent as:

- All Applicable State and Federal Laws;
- Numerical standards in regulation.

CLEANUP LEVELS

Method B

Method B is applicable to all sites

- Cleanup levels for individual substances must be at least as stringent as:
 - All applicable state and federal laws;
 - Or
 - For individual noncarcinogens, no adverse health effects;
 - For individual carcinogens, 1 in 1,000,000 excess cancer risk.

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CLEANUP LEVELS

Method B

- Cleanup levels for individual substances adjusted to take into account:
 - Multiple hazardous substances;
 - Multiple pathways of exposure.
- Total excess cancer risk (all substances and all pathways of exposure) cannot exceed 1 in 100,000.
- Hazard Index for noncarcinogens with the same toxic response cannot exceed 1.0.

Soils

Ground Water Protection

- Soil levels initially established at 100 x Groundwater cleanup level
- Rule provides flexibility to modify on a site-specific basis
 - Leaching tests
 - Fate and transport models
 - Matrix

91122001627

Soils

Direct Contact Pathway

Carcinogens

Soil Cleanup Level (mg/kg)

$$\frac{\text{RISK} \times \text{ABW} \times \text{LIFE} \times \text{UCF} 1}{\text{CPF} \times \text{SIR} \times \text{ABW} 1 \times \text{DUR} \times \text{FOC}}$$

RISK = Acceptable cancer risk level (1 in 1,000,000)

CPF = Carcinogenic Potency Factor as defined in
WAC 173-340-708(8) (kg-day/mg)

ABW = Average body weight over the period of
exposure (16 kg)

UCF 1 = Units conversion factor (1,000,000 mg/kg)

SIR = Soil Ingestion rate (200 mg/day)

AB1 = Gastrointestinal absorption rate (1.0)

FOC = Frequency of contact (1.0)

DUR = Duration of exposure (6 years)

LIFE = Lifetime (75 years)

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Soils

Other Pathways

- Inhalation of resuspended soils
- Food chain exposure
- Impacts on plants and animals

9 1 1 2 2 0 0 1 6 2 9

CLEANUP LEVELS

Method C

Used at sites meeting the following criteria:

- Conditions:
 - Area background concentrations;
 - Net environmental protection;
 - Technical possibility.
- All practicable methods of treatment.
- Institutional Controls.

CLEANUP LEVELS

Method C

(continued)

■ Cleanup levels must be at least as stringent as:

- Applicable state and federal laws;
- No significant adverse ecological impacts;
- For noncarcinogens, no adverse health effects;
- For carcinogens, one-in-a-hundred thousand cancer risk.

91122001631

Cleanup Levels Overriding Considerations

- Cleanup levels shall not be set below natural background levels.
- Enforcement of cleanup levels below the analytical detection limits shall be based on the practical quantitation limit.
- Cleanup levels for one media shall not cause violations of cleanup levels in other media.

91122071632

Selection of Cleanup Actions

Threshold requirements

- Be protective of human health and the environment
- Comply with cleanup standards
- Comply with applicable state and federal laws
- Provide for long-term monitoring

Other requirements

- Permanent solutions to the maximum extent practicable
- Reasonable restoration time
- Consider public concerns

91122001633

SUMMARY

■ Resolve difficult policy issues

□ Address wide range of concerns

■ Constrained flexibility

□ Workable framework for site cleanup

Coming Attractions

- Guidance materials
 - Soil-to-ground water pathway
 - Statistical procedures
 - Indicator hazardous substances
 - Substantial and disproportionate costs

- Ecological criteria
 - Interim guidance
 - Rule development
 - Rule amendment

- Cleanup levels for radionuclides

91122001635

Permanent Solutions

Determination of what is a "permanent solution to the maximum extent practicable" involves consideration of these factors:

- Overall protectiveness
- Long-term effectiveness
- Short-term effectiveness
- Permanent reduction in toxicity, mobility or volume
- Implementability
- Costs
- Community concerns
- Degree of recycling and reuse

91122001636

Permanent Solutions

The law states a preference for permanent to the maximum extent practicable.

Permanent solutions must meet these requirements:

- Achieve cleanup standards
- Require no further action at the cleanup site
- Require no significant action at offsite facilities

91122071637

Unit Managers Meeting

April 16, 1991

Program Integration

Ken Jordan

Manager, ERRA Program Management Systems

Westinghouse Hanford

Three Steps to Integration Within a Program:

1. Formally define (i.e., baseline) the workscope.
2. Develop and document each element of the management control system.
3. Apply the system to the workscope.

Three Steps to Integration Within a Program:

1. Formally define (i.e., baseline) the workscope.
2. Develop and document each element of the management control system.
3. Apply the system to the workscope.

How is Hanford ERRA Work Scope Defined?

- Work Breakdown Structure
- Work Breakdown Structure Dictionary
- DOE-HQ approval of the Field Office Management Plan
- Change Control

Three Steps to Integration Within a Program:

1. Formally define (i.e., baseline) the workscope.
2. Develop and document each element of the management control system.
3. Apply the system to the workscope.

Elements of the ERRA Management Control System:

- WBS and WBS Dictionary
- Roles and Responsibilities Definition
- Technical, Cost and Schedule Baseline
- QA, Records Management, Document Control, Configuration Management, Engineering Management policy and procedures
- Planning, Budgeting, Work Authorization and Change Control policy and procedures
- Performance Measurement and Reporting

Three Steps to Integration Within a Program:

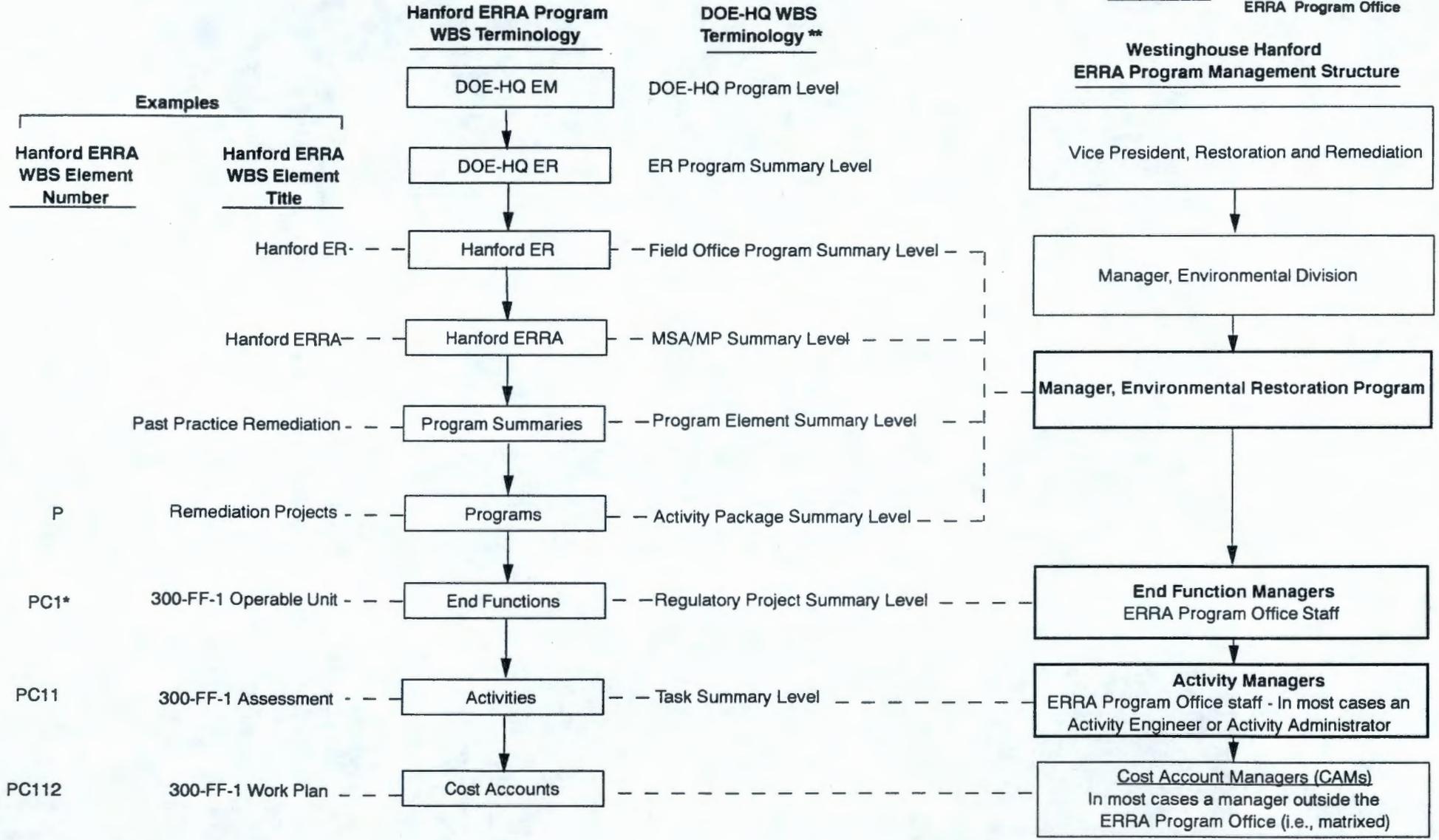
1. Formally define (i.e., baseline) the workscope.
2. Develop and document each element of the management control system.
3. Apply the system to the workscope.

Application of Management Control System Elements to the Workslope:

- Management Structure
- Training
- Solid work authorization documents (e.g., Cost Account Authorizations, Statements of Work)
- Periodic audits, surveillances and (when required) corrective action

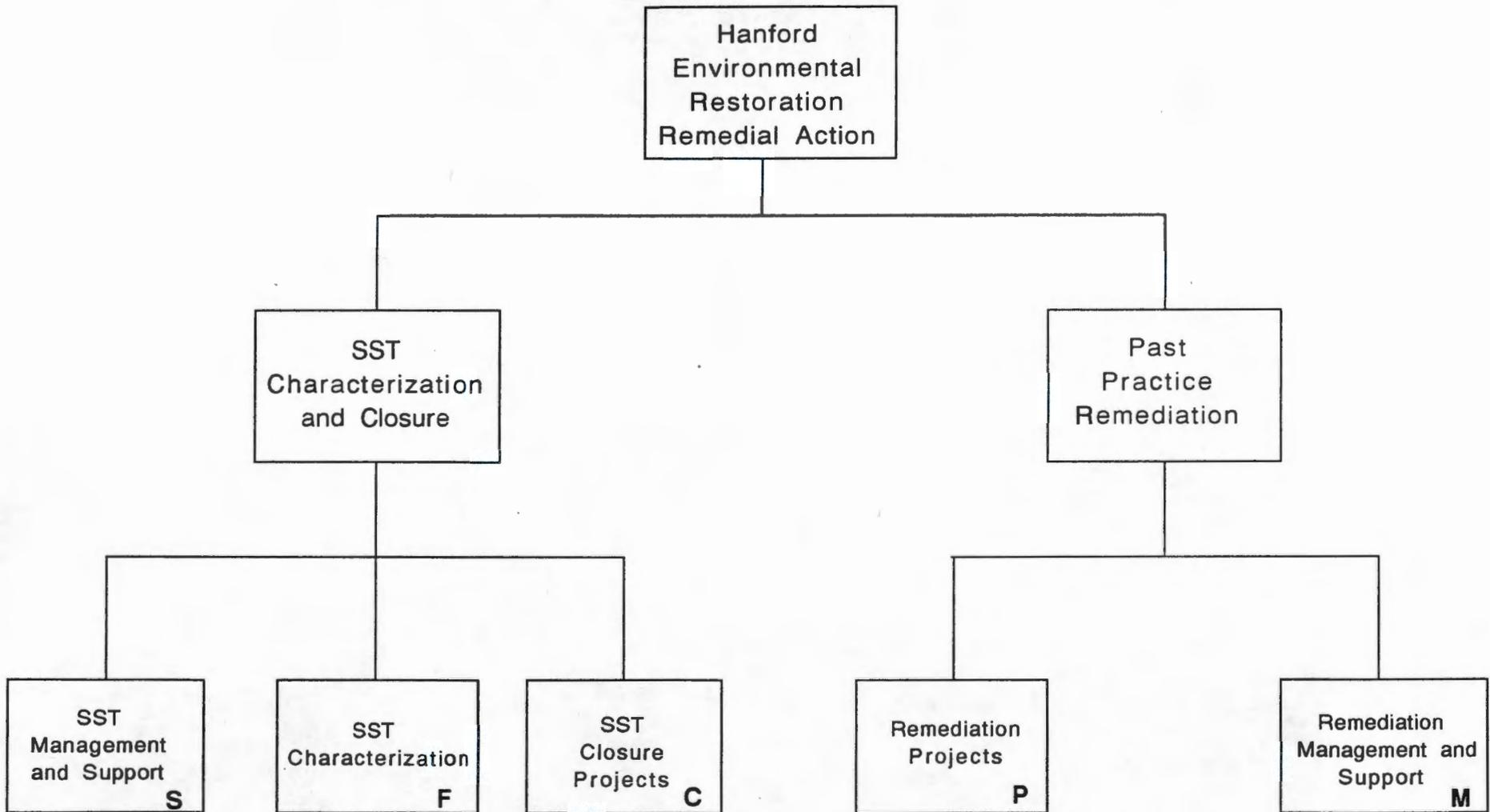
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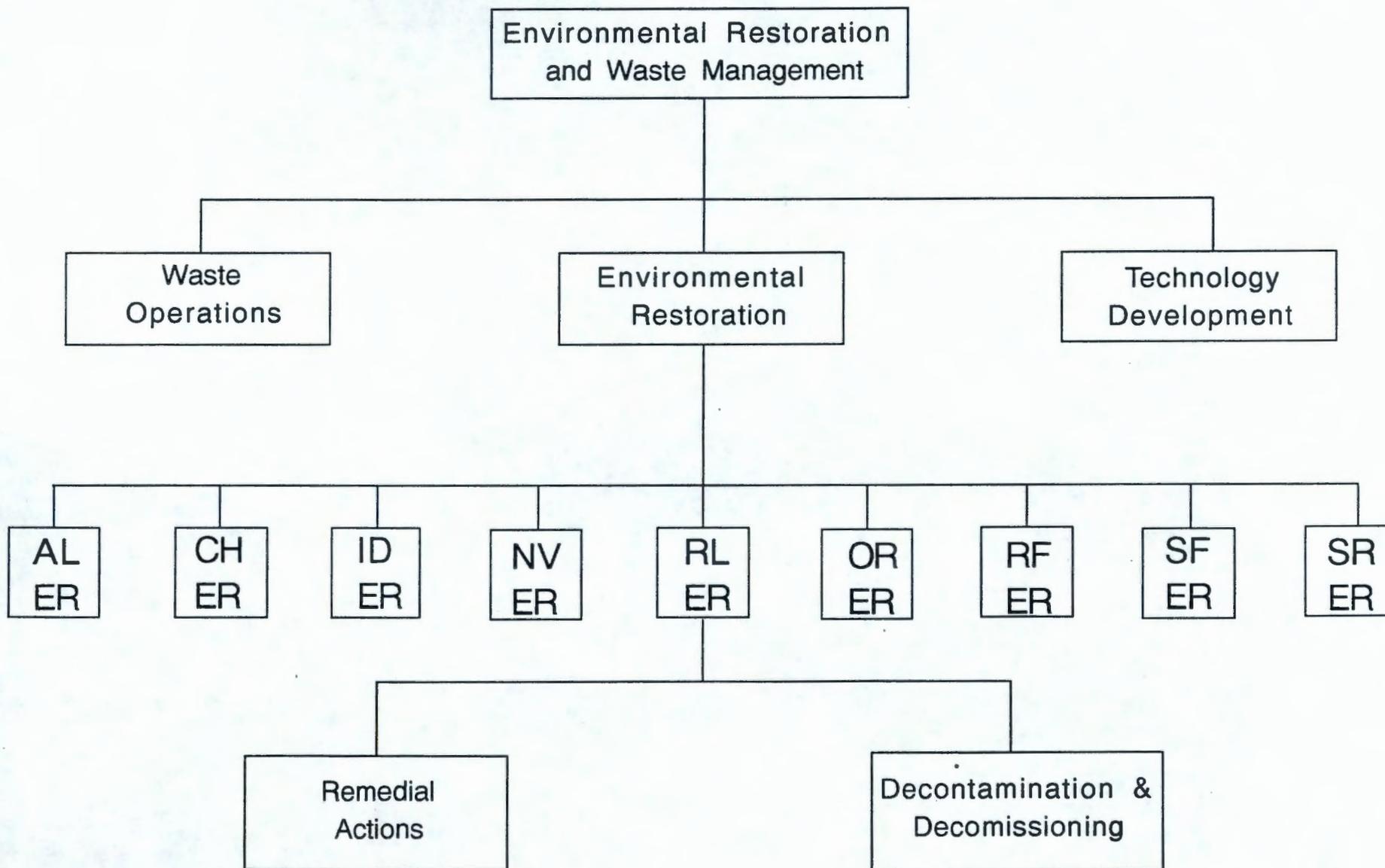
= Westinghouse Hanford
ERRA Program Office



* There are 74 End Functions within the Past Practice Remediation Summary Level. The number of End Functions results in the need for a three space alpha-numeric identifier to provide unique End Function identification.
 ** From draft DOE-HQ Environmental Restoration Program Guidance for Summary Work Breakdown Structure Development, November 1990

Figure 3-2. Relationship of Westinghouse Hanford Management Structure to the ERRA WBS



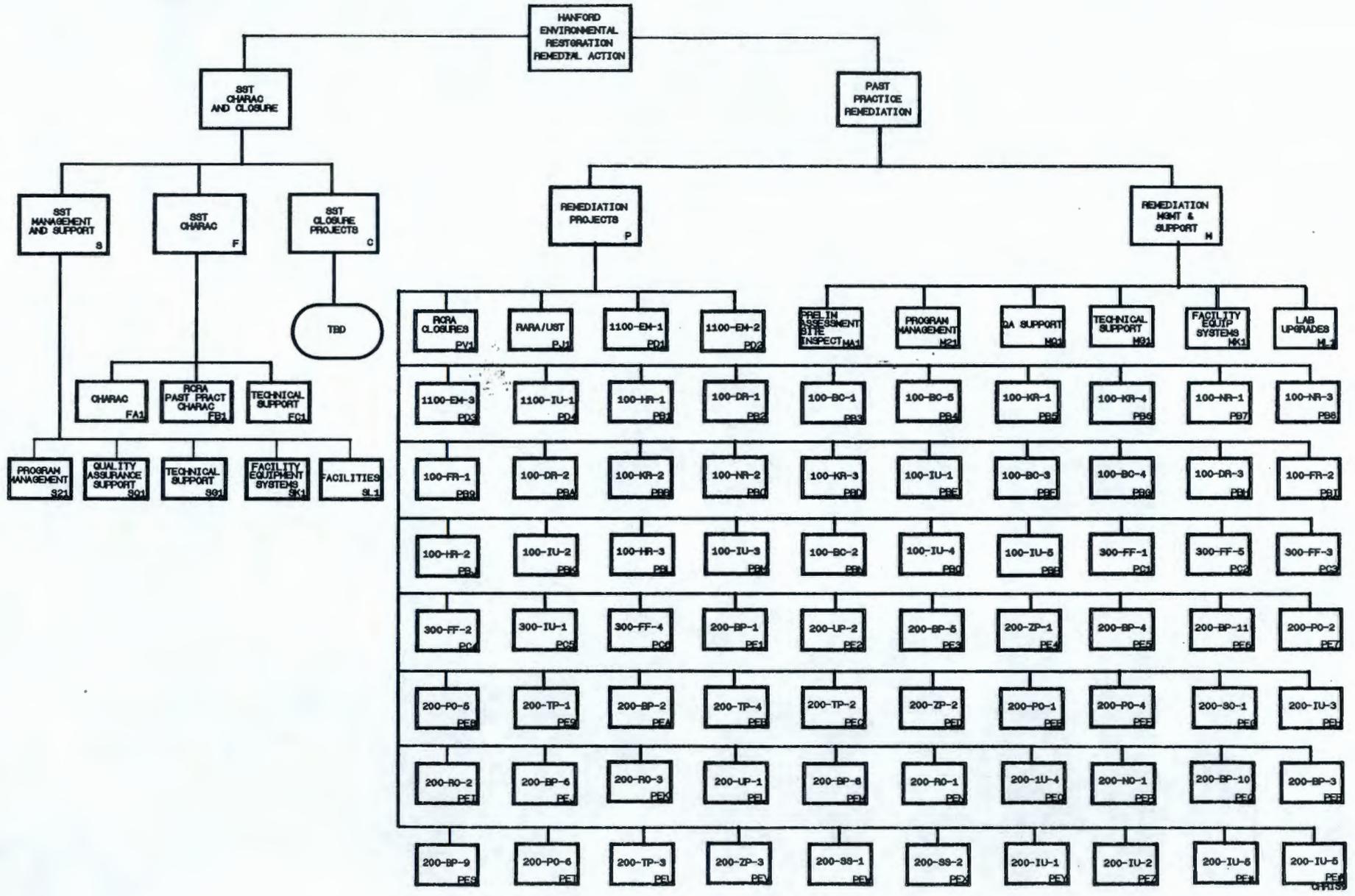


ERRA Information Management Planning

Location of Each Element of ERRA Information Management Planning:					
Information Types	Requirements:		Other Needs Specific to ERRA	Description of System to Meet Requirements & Needs Including Responsibility Assignment	Funding, Other Resources and Schedule to Implement the System
	QA & Technical	Programmatic			
Data	QARD/IMSP	IMSP*	IMSP	QAPP/IMSP	IMSEP**
Documents	QARD/DCP	DCP*	DCP	QAPP/DCP	IMSEP**
Records	QARD/RMP	RMP*	RMP	QAPP/RMP	IMSEP**

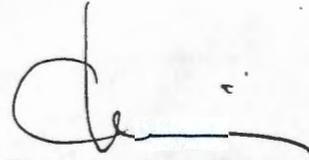
* Summary only, detailed programmatic requirements in TPA, FOMP, work plans and CAAs.

** Funding, other resources and schedule to implement also in Five-Year Plan.



April 18, 1991

Don't Say It.....Document It!



To: Doug Faccett, A4-35 From: Chris Chamberlain-Dow, L4-92
Re: Program Management System Steering Committee

Ken Jordan asked that I send the attached material to you as part of the record of yesterday's meeting. Should you have any questions, please give me a call on 6-0495.

91122001651

APRIL 1991

HANFORD UNDERGROUND STORAGE TANK PROGRAM

- INITIALLY MANDATED BY 40 CFR 280/281

- NEW STATE REGULATIONS IMPLEMENTED DECEMBER 29, 1990

- WHC ENVIRONMENTAL RESTORATION PROGRAM MANAGES THE OVERALL UST PROGRAM AT HANFORD

- FUNDING AND LINE MANAGEMENT RESPONSIBILITY VARIES DEPENDING ON ORGANIZATIONAL OWNERSHIP OF THE INDIVIDUAL UST

HANFORD UNDERGROUND STORAGE TANK PROGRAM

- **65 USTs REGULATED AT START OF THE PROGRAM (1988)/
58 CURRENTLY**
- **22 CLOSED (REMOVED) IN 1989**
- **5 CLOSED (REMOVED) IN 1990**
- **4 CLOSED (REMOVED) TO DATE IN 1991**
- **ADDITIONAL REMOVALS OF NON-REGULATED TANKS (ORPHAN) AS
FUNDING PERMITS**
- **5 RELEASE SITES TO DATE**

HANFORD UNDERGROUND STORAGE TANK PROGRAM

IMPLEMENTING DOCUMENTS

- . WHC IMPLEMENTATION PLAN**
- . DETAILED WORK PROCEDURES**
- . REMEDIATION PLANS**

HANFORD UNDERGROUND STORAGE TANK PROGRAM

TANK CLOSURES

- . **NOTIFICATION**
- . **GROUND PENETRATING RADAR**
- . **SAMPLE/ANALYSIS/PRODUCT REMOVAL/RINSE AND FLUSH**
- . **INERT TANK**
- . **EXCAVATE AND REMOVE PIPING**
- . **REMOVE UST**

HANFORD UNDERGROUND STORAGE TANK PROGRAM

TANK CLOSURES:FOLLOW-UP

- . SITE INVESTIGATION
- . BACKFILL
- . NOTIFICATION/REPORTS (IF REQUIRED)
- . TANK DISPOSAL
- . SITE REMEDIATION (IF REQUIRED)
- . YEAR-END UPDATE/ADVANCE NOTIFICATION

HANFORD UNDERGROUND STORAGE TANK PROGRAM

OPERABLE UNIT CONSIDERATIONS

INACTIVE OPERABLE UNIT

- NOTIFY UNIT MANAGER PRIOR TO REMOVAL
- NON-RELEASE SITE: NO FURTHER ACTION AFTER REMOVAL/ SITE INVESTIGATION REPORT TO UNIT MANAGER
- RELEASE SITE: COORDINATE REMEDIATION WITH UNIT MANAGER/ECOLOGY/EPA

HANFORD UNDERGROUND STORAGE TANK PROGRAM

OPERABLE UNIT CONSIDERATIONS

ACTIVE OPERABLE UNIT

- **NOTIFY UNIT MANAGER**
- **COORDINATE REMOVAL WITH APPLICABLE AUTHORITY**
- **NON-RELEASE SITE: NO FURTHER ACTION/SITE INVESTIGATION
REPORT TO UNIT MANAGER**
- **RELEASE SITE: INCLUDE REMEDIATION AS PART OF RI/FS
AND/OR CLEANUP OF OPERABLE UNIT**



P.O. Box 1970 MSIN B2-19
Richland, Washington 99352

Mike Hughes is working
this issue -

CALL FOR PAPERS



CALL FOR PAPERS

Environmental Remediation '91
Cleaning Up the Environment for the 21st Century

September 8-11, 1991
Pasco, Washington USA

A symposium on the requirements, technologies, and approaches for the investigation, restoration, and closure of sites contaminated with hazardous, radioactive, and mixed wastes.

The purpose of Environmental Remediation '91 is to provide for a broad technical and programmatic exchange of ideas and activities on major topics related to environmental remediation of Department of Energy facilities and sites. The general topics that will be addressed include institutional, educational, and public involvement issues and activities; science and technology activities; and approaches and experiences from field activities and completed cleanup programs. Commercial exhibits will be included, as well as an active guest program and tours.

Environmental Remediation '91, will be held September 8-11, 1991, at the Red Lion Inn in Pasco, Washington. The symposium is sponsored by the U.S. Department of Energy, and cosponsored by other agencies and educational institutions. This symposium continues the series of conferences held by the Department of Energy's Office of Environmental Restoration to review its programs and to exchange information with outside groups. The sessions will include invited and contributed papers on the general topics of technology development, regulatory actions and issues, and operations related to cleanup and closure. Technology development contributions can address any applicable restoration technology from basic concept to advanced demonstration. Regulatory/institutional contributions can address governing regulations, institutional and legal issues, public involvement, and educational programs. Operations can include those activities under RCRA, CERCLA, and state laws; remedial actions under FUSRAP and UMTRAP; and decontamination and decommissioning actions. Specific topics are listed below.

Those interested in contributing papers are invited to submit three copies of a 500-1000 word Summary of their proposed paper to the Technical Program Chairman, D. E. Wood, MSIN B2-19, Westinghouse Hanford Co., P.O. Box 1970, Richland, Washington 99352, telephone (509)376-7832, fax (509)376-2818. ~~September 12, 1991~~
Summaries will be reviewed by the Program Committee for originality, significance, and subject relevance. The summaries should be long enough to convey the substance of the paper, in terms of purpose, significance to the overall program, and specific conclusions from the work. Authors will be notified of paper status by May 31, 1991.

Full papers rather than summaries or presentations will be published in a proceedings. Completed papers for the Proceedings, in a format to be announced, are required by September 9, 1991. Accepted papers may be assigned to oral or poster sessions, based on the appropriate method of presentation for the content of the paper and on scheduling considerations. Publication will be identical for either case, with the Proceedings to be distributed to all registrants after the meeting following review of the full papers.

91122001659



CALL FOR PAPERS

Environmental Remediation '91
Cleaning Up the Environment for the 21st Century

September 8-11, 1991
Pasco, Washington USA

MEETING OFFICERS

General Chairman - Willis Bixby, DOE/RL
Assistant General Chairman - Steven Slate, PNL
Assistant General Chairman - Henry McGuire, WHC
Technical Program Chairman - Donald Wood, WHC
Meeting Organizer - Billie Neth, PNL

Form for submittal of summaries (Please attach to three copies of summaries).

Title: _____

Author(s)/Organization(s): _____

Contributed Paper () Invited Paper ()

Corresponding Author: _____

Organization: _____

Address: _____

Telephone: () _____ Fac () _____

Signature: _____

Note: Acceptance of paper for presentation requires an author-provided manuscript (in prescribed format) by September 8, 1991.

Major Topics of Interest:

- ER Programs, Strategic Planning, and Policy
- Risk Assessment Methods
- Remedy Selection Methods
- RODT&E Integrated Demonstrations
- Cleanup Standards
- Waste Tank Restoration
- Field Operations and Experience
- Land Use and Institutional Controls
- Ecosystem Cleanup
- NEPA/RCRA/CERCLA Compliance
- Public Involvement
- Legal, Regulatory, and Institutional Issues
- Remedial Actions - FUSRAP, UMTRAP, SFMP
- Decontamination and Decommissioning
- Education Programs Supporting ER
- Federal Facility Agreements
- Technologies for In Situ Isolation or Remediation of Soil and Ground Water