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**HANFORD SITE FACILITY
DANGEROUS WASTE PERMIT
ISSUE PAPERS**

DOE-RL/Contractor/Ecology/EPA Review Draft
March 14, 1991

D R A F T



HANFORD SITE FACILITY PERMIT ISSUE PAPERS

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Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

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2.0 Quality Assurance/Quality Control Plan

2.1 Issue

What constitutes appropriate QA/QC documentation for the Hanford Site Facility Permit?

2.2 Resolution

See attached proposal entitled *Hanford Site Facility Permit preliminary draft of the QA/QC section.*

2.3 Concurrence

Department of Energy, Richland Operations Office	Date
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Washington State Department of Ecology	Date
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Environmental Protection Agency	Date
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Westinghouse Hanford Company	Date
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Pacific Northwest Laboratories	Date
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HANFORD SITE FACILITY PERMIT
PRELIMINARY DRAFT OF THE QA/QC SECTION

DRAFT - C

2.0 QA/QC REQUIREMENTS

This section outlines the QA/QC policy and requirements that DOE-RL (permit holder) and its contractors (operators) will implement. Implementation of QA/QC programs contribute the assurance that treatment, storage, and disposal (TSD) facilities will satisfy the requirements of the permit.

2.1 POLICY

It is DOE-RL's policy that QA programs (QAP) be developed and implemented to ensure that risks and environmental impacts are minimized and that safety, reliability, and performance are maximized through the use of effective management systems.

2.2 OBJECTIVES

The objectives of the QAP are to ensure that 1) management provides planning, organization, direction, control, and support in order to achieve programmatic goals; 2) quality is achieved by personnel performing the activity; and 3) overall performance is reviewed and evaluated using an independent assessment process.

2.3 DEFINITIONS

- 1) Quality - The degree to which an item or process meets or exceeds the end user's requirements and expectations.
- 2) Quality Assurance - Those systematic actions that provide confidence that quality is achieved.
- 3) Quality Control - The system of activities whose purpose is to control the attributes of an item or process in accordance with specified requirements and standards of performance.
- 4) Graded Approach - A method that provides for the application of management controls commensurate with the level of present or potential hazards posed to human health or the environment should a release enter the environment.

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2.3 REQUIREMENTS

2.3.1 General

DOE-RL and its contractors will develop and implement QAPs that meet the requirements specified in this permit application. The QAPs will be applicable to 1) corrective action investigations, 2) design and construction of on-site TSD facilities, 3) waste analysis, 4) maintenance and operations of on-site TSD facilities and 5) closure/post closure of on-site disposal units. A graded approach will be used in developing and implementing QAPs. For example, the controls applicable to design and construction of a facility where the potential hazards to human health or the environment should a release occur are minimal shall be commensurate with those applicable to similar industrial applications. Where the potential hazards are substantial, controls that mitigate the probability of a release are increased.

2.3.2 DOE-RL (PERMIT HOLDER)

DOE-RL will develop and implement a QAP for the quality affecting activities performed by DOE-RL personnel. As a minimum, the QAP will address program, procurement, and assessment.

2.3.2.1

The program will incorporate the following minimum requirements:

- o A quality assurance policy statement will be issued by the RL Manager which commits the organization to implement a formal QAP
- o Top management will retain and exercise the responsibility for the scope and implementation of an effective QAP. Line management will be responsible for the achievement of quality. Each individual will be responsible for the quality of work.
- o The QAP will be binding on personnel, including those having responsibility for planning and scheduling. Management will take the necessary actions to ensure that the QAP is understood and implemented.
- o The quality of items and processes will be ensured to an extent consistent with their risk using a graded approach.
- o The QAP will describe organizational structure, functional responsibilities, levels of authority, and interfaces.
- o Readiness reviews will be performed prior to major scheduled or planned activities.

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- o Responsibility and authority to stop unsatisfactory work will be assigned such that planning and schedule considerations do not override safety considerations.

2.3.2.2

The procurement section will incorporate the following minimum requirements:

- o Applicable technical and administrative requirements will be invoked on contractors, including the applicable requirements invoked by the RCRA permit.
- o An evaluation will be performed to ensure that only qualified contractors are selected.
- o Periodic assessments will be conducted to verify the quality of the contractor's work.
- o Review of contractor's QAPs.

2.3.2.3

The assessment section of the QAP will incorporate the following minimum requirements:

- o Planned and periodic independent assessments will be established and implemented. The assessments will verify compliance to the requirements contained in the permit. Additionally, the assessments will consider the achievement of quality and the improvement of items and processes.
- o Personnel performing independent assessments will monitor work performance, identify abnormal performance and precursors of potential problems, identify opportunities for improvement, identify areas where permit modifications may be appropriate, report results to a level of management having the authority to effect corrective action, and verify satisfactory resolution of problems.
- o Personnel performing independent assessments will be technically knowledgeable and focus on improving the quality of the processes that lead to the end product. They will also assess areas such as contingency and emergency planning, training, etc.
- o Scheduling of assessments and allocation of resources will be based on the status of and risk associated with the item or process being assessed.

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2.3.2 DOE-RL CONTRACTORS (OPERATORS)

DOE-RL will require its contractors to develop and implement QAPs appropriate (graded approach) for the quality affecting work they are contractually responsible for performing. The scope of the QAPs will include 1) corrective action investigations, 2) design and construction of on-site TSD facilities, 3) waste analysis, 4) maintenance and operations of on-site TSD facilities, and 5) closure/post closure of on-site disposal units. Unit specific permit applications will define the specific applicable work, the grading applied to

the work, and the specific QA/QC requirements applicable to the work or each major phase of the work. DOE-RL contractors' QAPs will be written to meet the requirements of the current revision of DOE Order 5700.6 and section 6.5 of the Hanford Federal Facility Agreement and Consent Order. Off-site TSD facilities will be required to have applicable permits and their performance will be assessed by the contracting organization.

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3.0 Training Plan

3.1 Issue

What constitutes appropriate training plan documentation for the Hanford Site Facility?

3.2 Resolution

The regulatory basis for dangerous waste training requirements is outlined in Washington Administrative Code (WAC) 173-303-330. To satisfy these requirements, Hanford will provide an "umbrella" training plan that will include a description of the four dangerous waste worker categories into which all employees may be classified. A written description of the type and amount of both initial and continuing training required by dangerous waste workers and a description of the systems used to document the completion of training will also be included.

Each Waste Management Unit permit will also contain a "sub-tier" training plan which will provide specific information regarding dangerous waste management positions. Included in these will be specific job descriptions and titles as well as the names of employees filling each position.

In addition, some training required of contractor personnel is mandated by separate Occupational Safety and Health Administration (OSHA) and DOE guidelines, but has been intertwined with Hanford Site dangerous waste worker training programs. This type of training includes radiation worker safety, mixed waste, and OSHA hazardous waste site worker training. These types of training courses will not be included in the Hanford Site Facility Permit as they are supplemental to information required by WAC-173-303-330 and are monitored for compliance by other government agencies.

3.3 Concurrence

Department of Energy, Richland Operations Office	Date	Washington State Department of Ecology	Date
Environmental Protection Agency	Date	Westinghouse Hanford Company	Date
Kaiser Engineers Hanford Company	Date	Hanford Environmental Health Foundation	Date

9413139.0416

Pacific Northwest
Laboratories

Date

9413139.0412

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3.3 Concurrence

Department of Energy,
Richland Operations Office

Date

Washington State Department
of Ecology

Date

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

9413139.0418

Pacific Northwest Laboratories

Date

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4.0 Dangerous Waste Verification (Onsite)

4.1 Issue

Is an analytical program required to verify the constituents of waste, or the contents of dangerous waste containers, moved within the Hanford Site Facility?

4.2 Resolution

A *Hanford Site Facility Waste Analysis Plan* will be prepared in accordance with RCRA and WAC regulations. The plan will define the requirements for wastes moved onsite and for wastes received for management from offsite generators. The offsite requirements will comply fully with the WAC regulatory stipulations for facilities receiving waste from offsite generators. The onsite waste movement requirements will also be compliant with regulatory stipulations for onsite waste movement. Wastes being shipped offsite for treatment, storage, and/or disposal will not be included in an onsite verification program, since these wastes will be verified prior to shipment offsite (using TSD required profiles). The program for wastes to be managed onsite will use the current Hanford program as their basis. Additional Quality Assurance/Quality Control requirements will be imposed in the plan to assure that waste generating operations properly characterize, designate, package, and otherwise manage, wastes from those operations. These QA/QC requirements will include some level of physical or chemical verification for wastes generated and managed onsite. For a given waste container, it is anticipated that verification would be performed only once (assuming positive verification). The waste container would be sealed or otherwise marked to make it clear that it had been verified. For liquid wastes moved onsite in bulk, either by tankers or pipeline, waste verification will be conducted per the receiving unit's waste analysis plan. Liquid and solid wastes that are moved for further treatment would undergo additional analyses prior to movement, and then be moved only after detailed review and approval. Treatment process control samples will undoubtedly be taken as needed to assure that the potential for process upset is minimized.

The goal of RCRA and WAC 173-303 is to assure that hazardous/dangerous wastes are properly managed. Thus the Hanford program must encourage proper waste management (i.e., require waste analyses adequate to assure proper designation, appropriate and reliable packaging, safe and secure storage, and proper treatment and disposal). A facility waste analysis plan will help meet this goal, and will also enhance the continuity of unit specific waste analysis plans. It should also be clear in this plan that improper management will result in significant penalties to those found to be improperly managing wastes.

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5.0 Soil and Groundwater Background Determination
and Clean-Up Standards

1.1 Issue

What is the appropriate method for determining background at the Hanford Site Facility?

1.2 Resolution

The requirements to determine background threshold levels and clean-up standards are based on the Washington Administrative Code (WAC) 173-303-610, "Closure and Postclosure." Due to the similarity of the geologic makeup of the Hanford Site, the probability exists that background levels can be established on a Site-wide basis. The approach to establish background values is to conduct a systematic sampling and analysis program which will obtain enough data to statistically verify background values.

Also, in a related issue, Ecology is proposing to integrate closure performance standards with health and environmental protection based levels. The determination of health based levels will be based on the formulas and guidance contained in the Model Toxic Control Act (MTCA), Washington Administrative Code, WAC 173-340 which became effective on February 28, 1991.

This information of background threshold values and closure performance standards will be included in Chapter 11.0 of the Facility permit application.

1.3 Concurrence

Department of Energy,
Richland Operations Office

Date

Washington State Department
of Ecology

Date

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

9413139.0422

6.0 Groundwater Monitoring/Vadose Zone
Well Construction Requirements

6.1 Issue

What is required to meet interim or final status groundwater monitoring/Vadose zone well construction requirements at the Hanford Site Facility?

6.2 Resolution

Milestone M-24-00 set forth in the Tri-Party Agreement will continue to be met. This milestone calls for the installation of RCRA compliant monitoring wells at the rate of 50/year until compliance is achieved. Groundwater monitoring conditions set forth in individual waste management unit permits will also be met as such permits are finalized.

Well construction/rehabilitation will be handled in accordance with a letter on this subject co-signed by Ecology and EPA, and transmitted to the DOE/Contractors in September 1990.

Purgewater will be handled in accordance with an ancillary agreement finalized among the DOE-RL/Contractors, Ecology, and EPA in August 1990.

The above groundwater information will be included in Chapter 5.0 of the Hanford Site Facility Permit Application. Also to be included in this permit application will be a map of RCRA-compliant wells and a description of Environmental Investigation Instructions (EIIs) covering groundwater monitoring activities. A current copy of the EIIs will be maintained on file at the Hanford Site Facility Record Repository.

The initial Hanford Site Facility Permit will not address vadose zone monitoring requirements. Future modifications of this permit may address this subject dependent upon the outcome of discussions with Ecology and EPA regarding the basis and objectives for a vadose zone monitoring plan. The need for such discussions was identified in letter transmitted from the DOE-RL/Contractors to Ecology and EPA in February 1990 (Wisness to Stanley, February 1990, 90-ERD-31).

6.3 Concurrence

Department of Energy,
Richland Operations Office

Date

Washington State Department
of Ecology

Date

9413139.0123

Environmental Protection Agency Date

Westinghouse Hanford Company Date

Pacific Northwest Laboratories Date

9413139.0124

7.0 Reporting Requirements

7.1 Issue

What constitutes the appropriate means to respond to reporting requirements for hazardous substances releases?

7.2 Resolution

The DOE/contractor has implemented the requirements of DOE Order 5000.3A. The Order addresses the requirements to report events that are categorized as "Off Normal Events;" "Unusual Occurrence;" or "Emergencies." Contractors have developed procedures to provide the mechanisms and systems to make required notifications to offsite agencies in accordance with DOE and WAC reporting requirements. DOE-RL submitted two letters to Ecology (Reference 1 and 2) which propose criteria for reporting of spills of dangerous waste, extremely hazardous waste, and acutely hazardous waste. An agreement relative to what is required to be reported (quantities and materials) to comply with the WAC requirements is stated in References 1, and 2. DOE and Contractors will report spills in accordance with WAC 173-303-145 and the referenced correspondence. Verbal notification will be provided to Ecology within 24 hours in the following instances (as stated in Reference 1):

1. Any release which requires notification to the National Response Center pursuant to 40 Code of Federal Regulations (CFR) 302.4;
2. Any release resulting in a discharge to the ground, groundwater, or surface water if (1) the materials was regulated as a dangerous waste prior to release and, (2) for wastes designated due to a characteristic or criterion, if the material exhibits the characteristic or criterion at the point of discharge to the environment;
3. Any release resulting in a discharge of dangerous waste to the ambient air will be reported if the release requires notification pursuant to 40 CFR 302.4 (See criterion 1). Additionally, DOE will notify the Benton-Franklin-Walla Walla Counties Air Pollution

Reference 1: DOE-RL to Ecology (R.A. Holten (DOE-RL) to R.F. Stanley (Ecology)), "Reporting of Hazardous Substance releases Pursuant to Washington Administrative Code 173-303-145," dated June 21, 1990.

Reference 2: DOE-RL to Ecology (R.A. Holten (DOE-RL) to T.L. Nord (Ecology)), "Reporting of Hazardous Substance Releases Pursuant to Washington Administrative Code 173-303-145," dated September 27, 1990.

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Control Authority (BFWW) of any release which requires notification pursuant to the condition of Prevention of Significant Deterioration (PSD) permit number PSD-X80-14;

4. Any release which requires notification to the Department of Transportation pursuant to 49 CFR 171.15;
5. Any release which requires notification to the community emergency coordinator pursuant to 40 CFR 355.40;
6. Any oil release which requires notification to the National Response Center pursuant to 40 CFR 355.40;
7. Any release of a regulated substance from an underground storage tank requiring reporting pursuant to 40 CFR 280.3. These releases will be reported to Ecology's Central Region Office.

Modification to Criteria Number 2 above (modified by Reference 2):

2. Any release equal to or greater than the reportable quantity resulting in a discharge to the ground, ground water, or surface water if (1) the material was regulated as a dangerous waste prior to the release, and (2) for wastes designated due to a characteristic or criterion, if the material exhibits the characteristic or criterion at the point of discharge to the environment. Reportable quantities are 1 pound for Acutely Hazardous Waste, 10 pounds for Extremely Hazardous Waste, and 100 pounds for Dangerous Waste.

Revisions as a result of changes to DOE Emergency Preparedness requirements may also be made to reporting procedures, but will not be provided to Ecology for review because they are used to comply with other contractual requirements aside from the WAC.

Reporting will be conducted in accordance with a notification matrix developed between DOE-RL, the Washington State Department of Community Development, and the Oregon Department of Energy (as proposed in a draft dated January 2, 1991). In addition, plans are to provide 'Page 1s' of Occurrence Reports to the states of Washington and Oregon within 72 hours of their completion.

The above reporting requirement information will be included in Chapter 6.0 of the Hanford Site Facility Permit Application.

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8.0 Financial Responsibility/Liability

8.1 Issue

Under RCRA, should a government contractor who is designated as a "co-operator" to certain waste management units on a federal facility be responsible for the financial liability, assurances and cost estimates when the federal government who is the "owner" and "operator" of the facility itself is exempt from such requirements? An ancillary issue is how information regarding closure costs should be transmitted to Ecology.

8.2 Resolution

Neither the DOE nor the Contractor will be compelled to provide for the requirements set forth in WAC 173-303-620, however, Ecology reserves its rights to reopen this matter at a later time.

DOE-RL will use the general approach outlined in letter from T. L. Nord (Ecology) to S. H. Wisness (DOE-RL) dated 01-28-91. Cost estimates for closure and post closure activities will not be provided as a means to satisfy the financial assurance requirements of WAC 173-303. However, beginning 01-01-92, DOE-RL will provide an annual report on closure cost estimates for the waste management units covered in the Hanford Facility Permit.

8.3 Concurrence

Department of Energy,
Richland Operations Office

Date

Washington State Department
of Ecology

Date

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

9413139.0428

9.0 Mixed Waste/Radionuclide Jurisdiction

9.1 Issue

Is Ecology outside the scope of its legal authority when attempting to control the radioactive components of mixed waste resulting from the DOE-RL Operations?

9.2 Resolution

The mixed waste/radionuclide jurisdiction issue has been discussed at a number of unit manager meetings with Ecology. During these discussions, Ecology has not agreed to a dual control of mixed waste whereby DOE retains jurisdiction of the radioactive components and Ecology retains control of the hazardous components of the mixed waste. DOE-RL will not relinquish its jurisdiction over source, special nuclear material or by-product materials which are specifically exempted from the federal RCRA program because the control of these materials is governed by the Atomic Energy Act. Ecology will not recognize that since U. S. Congress has already acted in the area exempting specific radioactive materials, it is pre-empted by federal law from also regulating in that area. No resolution has been reached in this matter.

9.3 Concurrence

Department of Energy,
Richland Operations Office

Date

Washington State Department
of Ecology

Date

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

9413139-0129

10.0 Protection of Information

10.1 Issue

Can DOE-RL deliver all the information requested by Ecology regarding the RCRA waste management units within the Hanford Site Facility to Ecology when Ecology refuses to provide for the non disclosure of any information. An ancillary issue is how to provide the RCRA information to Ecology.

10.2 Resolution

DOE-RL and its contractors will not disclose those documents which they are required by law, regulation or contract to keep secret, confidential or privileged.

Information which may be disclosed to Ecology only, will be marked with a legend. The legend will give an indication of to whom the information may be disclosed and why such information can not be disclosed to members of the public. Ecology will provide confidentiality for information clearly marked with a legend indicating the information is not available for public disclosure.

A description of applicable facility procedures will be included in the permit. The actual procedures will not be included in the permit but will be available at the waste management unit for inspection by Ecology. Further, information copies will be provided to an onsite Ecology inspector as expediently as possible when requested.

The DOE-RL and contractor will attempt to clear prospectively those documents that Ecology may be interested in reviewing. Where information is not cleared for release to the public, the DOE-RL and contractor will provide an expedited method for clearance.

DOE-RL may provide a public notice that information at Ecology may or may not reflect actual procurement packages as necessary.

10.3 Concurrence

Department of Energy,
Richland Operations Office

Date

Washington State Department
of Ecology

Date

9413139.0430

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

190-666-16

11.0 Minor/Major Permit Modifications

11.1 Issue

What is the methodology by which minor/major permit modifications will be carried out?

11.2 Resolution

All Permit modifications shall be carried out in accordance with Washington Administrative Code 173-303-830 with the exception that class 1 changes shall be submitted to Ecology on an annual basis.

Sections of documents referenced in the Permit that are not subject to WAC requirements shall be excluded from permit modification requirements.

11.3 Concurrence

Department of Energy,
Richland Operations Office

Date

Washington State Department
of Ecology

Date

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

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12.0 Identification of Solid Waste Management Units

12.1 Issue

What is a realistic approach for the identification and documentation of SWMUs on the Hanford Site?

12.2 Resolution

The proposed approach to satisfy the requirements for identification and update of SWMUs and their releases would use a combination of the following products:

- o Hanford Waste Information Data System (WIDS)

The WIDS database currently identifies the universe of DOE waste units on the Hanford Site, which includes all DOE-RL SWMUs. Also included are non-SWMUs such as one-time spills, sanitary waste sites, and structures awaiting decontamination and decommissioning. A new field has been added designating if a waste unit is a SWMU. Effort is currently underway to add any additional SWMUs which have been identified recently, primarily through operable unit scoping studies. The WIDS contains the descriptive information required for each SWMU, to include known releases of hazardous wastes and constituents. The WIDS therefore would represent the official current listing of SWMUs on the Hanford Site. As new SWMUs are identified, they would be added to WIDS.

- o Hanford Site Waste Management Units Report (HSWMUR)

The HSWMUR is updated annually in January, unless it is determined that an update is not necessary. The Report reflects summary information on each waste unit in the WIDS. The next update will be included as part of the submittal of the RCRA Permit Application, reflecting all known SWMUs on the Hanford Site at the time of permit issuance. As discussed above, notification of additional units would then be via the WIDS. The HSWMUR will include a set of the maps discussed below. Each annual update will reflect the newly identified SWMUs from the preceding year.

- o Set of Hanford SWMU Topographical Maps

Current maps included in the HSWMUR identify all the waste units, but are not topographical in nature. Due to the size of the Hanford Site and projected number of SWMUs, creativity is necessary to develop a set of useful maps that meet the intent of the regulations. This should be tied to the mapping/GIS activities being conducted in support of the clean-up program. It is recommended that the existing non-topographic maps contained in the HSWMUR be used until an automated mapping system is in place to develop maps more in line with the regulatory requirements.

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o Hanford Site RCRA Permit

The RCRA Permit will reference the above data base and report for SWMUs and known releases for the DOE-managed units. The permit would then have a separate section to list SWMUs of other responsible parties that are on DOE-owned land.

12.3 Concurrence

Department of Energy,
Richland Operations Office

Date

Washington State Department
of Ecology

Date

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

9413139.0124

13.0 Corrective Action Schedules of Compliance

13.1 Issue

How can the requirements for providing corrective action schedules of compliance as part of the RCRA Permit be satisfied, while achieving the RCRA/CERCLA integration called for in the Tri-Party agreement (TPA)?

13.2 Resolution

Include a section in the RCRA Permit on schedules of compliance for corrective actions, to include the following elements:

- RCRA Facility Assessment (RFA)
- RCRA Facility Investigation/Corrective Measure Study (RFI/CMS)
- Corrective Measure Implementation (CMI)
- Interim Measure (IM)

In each of these elements provide a description of how the process is to be carried out as described in the Tri-Party Agreement. Define the plans to be developed. Reference to the Tri-Party Agreement work schedule for the commitments for the plans and carrying out of the work.

Remedy selections, either for corrective or interim measures, must be incorporated into the permit via a major modification. Include a section where such remedy selections would be listed and referenced to an attachment to the permit for the description of the agreed to remedy. The schedule of compliance for the selected measures would be provided as part of the Tri-Party Agreement.

Each time an RFI/CMS plan, CMI plan, or IM proposal is approved and issued, a Tri-Party Agreement change package would be prepared and approved by the parties to place selected key events contained in the plan on the Tri-Party Agreement work schedule as milestones. Submittal of the plans/proposals to the regulatory agencies would have already been placed on the work schedule as milestones at the time that the operable unit was scheduled for action or the IM was identified.

13.3 Concurrence

Department of Energy,
Richland Operations Office

Date

9413139.0435

Washington State Department
of Ecology

Date

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

9413139.0436

14.0 Waste Container Labeling Requirements14.1 Issue

What is the scope of containers that require labeling in a manner which adequately identifies major risks associated with the container contents?

14.2 Resolution

All containers shall be marked with the labeling system currently used for compliance with U.S. Department of Transportation (DOT) requirements. In addition to the DOT required labels, containers shall be marked in a manner which adequately identifies major risks associated with the container waste contents as follows:

<u>Risk Marking</u>	<u>Waste Code for Contents</u>
- "PERSISTENT"	-- WPO1, WPO2, WPO3
- "TOXIC"	-- WTO1, WTO2
- "CARCINOGENIC"	-- WCO1, WCO2

The risk marking requirements apply to all containers holding wastes regulated under Washington Administrative Code 173-303. Dangerous wastes in permitted or interim status storage units prior to implementation of the additional marking requirements are exempt until they are removed from the storage unit. The storage area holding these wastes shall be marked in the manner identified above.

14.3 Concurrence

Department of Energy,
Richland Operations Office

Date

Washington State Department
of Ecology

Date

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

15.0 Legal Description of Dangerous Waste Management Units

15.1 Issue

What is required in the way of a legal description for the Hanford Site Facility and waste management units within this facility, particularly if such units are to be clean closed?

15.2 Resolution

The WAC 173-303-610 and WAC 173-303-806 requirements for including a legal description of the boundaries of dangerous waste sites will be satisfied in the following manner.

The current legal description of the Hanford Site will be included in the Hanford Site Facility permit with the exclusion of the following four areas: (1) land administered by the Bonneville Power Administration, (2) land leased to the Washington Public Power Supply System (WPPSS), (3) land owned or leased by Washington State, and (4) land north of the Columbia River. A note will be made in the Hanford Site Facility Permit that WPPSS will receive their own TSD permit and, hence, will not be included in the DOE-RL/Contractors permit

The Records of Survey that are used to define the legal boundaries of the waste management units will identify these boundaries with Washington State Lambert Coordinates based on the North American Datum of 1983. The Record of Survey will relate the boundaries to Township, Range, and Section by scaling on US Geological Survey topographic maps. The Records of Survey will be submitted to the local authority with jurisdiction over local land use, and to the Benton County Auditor if at closure dangerous waste is left in place.

Records of Survey for five waste management units will be included in Revision 0 of the Hanford Site Facility permit application. These waste management units include the (1) 616 Nonradioactive Dangerous Waste Storage Facility, (2) Simulated High-level Waste Slurry Treatment and Storage, (3) 300 Area Solvent Evaporator, (4) 183-H Solar Evaporation Basins, and (5) 2101-M Pond.

15.3 Concurrence

Department of Energy,
Richland Operations Office

Date

Washington State Department
of Ecology

Date

9413139-0380

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

9413139.0439

16.0 Onsite Waste Transportation

16.1 Issue

Is the transportation of dangerous waste over publicly-accessible roadways within the Hanford Site Facility still considered to be on-site transportation?

16.2 Resolution

for purposes of RCRA, the Hanford Site is considered to be one facility. All dangerous waste activities within the Hanford Site Facility boundary are considered to be on-site, and not subject to off-site waste transportation requirements. An operating record will be maintained for all documentation that is required by WAC 173-303-380 for on-site waste transportation. In addition, a means of documenting on-site waste transfers will be utilized and the associated records will be maintained as part of the operating records.

16.3 Concurrence

Department of Energy,
Richland Operations Office

Date

Washington State Department
of Ecology

Date

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

9413139.0440

PROPOSAL

DATA SYSTEMS DEVELOPMENT FOR THE HANFORD FACILITY RECORDS REPOSITORY

March 14, 1991

Westinghouse Hanford Company
Richland, Washington

UNCLASSIFIED

9413139.0441

EXECUTIVE SUMMARY

This proposal is submitted in response to Issue 17.0 which states "What is required to maintain Hanford Site Facility and waste management unit operating records?" This proposal describes the Hanford Facility Records Repository (HFRR) which is required in support of the Washington State Department of Ecology issuing a permit for the Hanford Site. Data Systems Development proposes to develop a Records Management Plan which meets all of the requirements to implement a HFRR and implement the actions described in the plan.

The DSD proposes to develop a data system in three phases:

Phase I. Define system requirements and perform preliminary system design.

Phase II. Develop Records Management Plan

Phase III. Implement system plan, prepare facilities and train staff.

The phases may be performed concurrently to the extent that preliminary system design indicates that it is practical.

Data Systems Development currently has the resources necessary to perform these tasks, and has experience developing similar systems.

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BMND-661616

PROPOSAL

DATA SYSTEMS DEVELOPMENT FOR THE HANFORD FACILITY RECORDS REPOSITORY

1.0 INTRODUCTION

This proposal has been developed to address the specific concerns related to Hanford Site facility operating records and their accessibility in support of the Hanford site permit. The proposal addresses the specific action to "Investigate possible location and maintenance organization for a Facility Record Repository and provide status..."

2.0 PURPOSE

The purpose is to develop a methodology for establishing a Hanford Facility Records Repository (HFRR) to support the Hanford Site facility permit. A centralized location must be established in order to provide a single point of contact for onsite regulator inspectors to access environmental compliance documentation within a reasonable amount of time. The centralized facility must be within the boundaries of the Hanford Site facility. The HFRR will maintain all facility operating documents and provide an interface with various organizations that require access to the information. All Hanford waste sites identified in the Hanford facility permit will use the HFRR for maintenance of their record copy documentation in accordance with the terms outlined in federal and state laws and regulations and according to established company procedures, DOE orders and standard record keeping practices.

3.0 APPROACH (System Description)

The objective is to provide a centralized location (i.e., 200 East Area) to maintain record copy of Hanford facility operating documents. The centralized location will be described as the HFRR and will be developed and managed by Westinghouse Hanford Company/U.S. Department of Energy. The facility will also be available to regulatory inspectors for the performance of onsite inspections of Hanford waste sites. Documents located in the facility will be cleared upon submittal to the HFRR. The HFRR will also interface with the Environmental Data Management Center (EDMC) to ensure that documents identified as administrative records will be transmitted to the EDMC. The system may also be used to track environmental compliance for the site as well as provide for protection of the facility operating documentation. Operating records will be cleared, indexed, keyworded, cross referenced, and protected (microfilmed/stored in fire proof cabinets). The operating records will also be easily retrievable. Another feature is to locate satellite stations at various waste sites. Satellites will provide access to the central system at any given waste site. This feature will

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assist onsite inspectors, DOE and it's contractors with access to facility operating documents and information.

In order to begin the process a HFRR records management plan must be developed and approved by all interested parties that are previously identified. Concurrence on the approach and the method of system development must also be obtained before developing the HFRR records management plan.

The system design will also be represented in the records management plan. Similiar systems on the Hanford site will be used as models for the basic system structure and specific criteria can then be imposed and incorporated based on applicable requirements.

4.0 SCHEDULE

The schedule is provided to show lead times required to develop and implement the HFRR system. The schedule is broken down into a three phase approach. It is recognized that the HFRR is targeted for implementation on 01-01-92.

Obtain concurrence to proceed	Day 0
Phase I - System Design	Complete in 60 days
<ul style="list-style-type: none">• Detailed design• Secure funding• Locate facility• Hire initial staff	
Phase II - System Development	Complete in 120 days
<ul style="list-style-type: none">• Records management plan• Occupy facility• Procure equipment• Identify specific requirements• Establish waste unit interfaces	
Phase III - System Implementation	Complete in 180 days
<ul style="list-style-type: none">• Implement system• Test and debug system• Secure interfaces• Receive documents	

5.0 RESOURCES

An initial staff of two personnel will be required to develop the records management plan and begin a detailed system design. The initial staff will consist of a records management specialist and a clerk. A full staff at the time of implementation would include but not be limited to a basic records organization structure consisting of a manager, two specialists and 4 to 6 clerks. Staff growth would be projected based on work load and schedule.

Equipment and facilities would include a computer system, offices for staff and processing areas for receipt control, clearance, keywording and document storage activities. Details of particulars and cost estimates would be provided during Phase I.

6.0 ISSUES

Issues may be identified during the three phase process that will require resolution. Typical issues are; identification of the record copy file of which the HFRR is proposed to be, the significance of whether to proceed with microfilming (a recommended practice for the purposes of this proposal), and optical disk technologies. For the purpose of this proposal it is recommended that priority be placed on developing a system and establishing the HFRR. The various issues can be addressed once the process for management and control of the facility operating records has been established. Once the initial three phased approach has been completed the focus can then be adjusted to technologies and additional strategies. Features such as action tracking and compliance tracking can also be addressed at this time as well as implementing other features such as satellite stations and multiple access.

7.0 CAPABILITIES

The Engineering Services organization has the capabilities required to perform all work described in this proposal. Initial contacts have already been made to identify the needs and resources required for the task. A broad base of expertise is also available through engineering services. The Data Systems Development group specializes in the development and implementation of records management systems and also has a reputation for customer service. The EDMC, an organization established through Data Systems Development, is currently the model example throughout the DOE sites for designing and implementing an administrative record file.

Additional expertise is also available from the other Data Systems Development organizations including but not limited to the Project Records Management Center (PRMC) which supports the Hanford Waste Vitrification Plant (HWVP), Tank Farm Information Center (TFIC), and the EDMC.

Data Systems Development also has the mobility to begin development work immediately by shifting existing personnel into certain areas upon approval and concurrence.

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8.0 CONCLUSION

The preliminary research involved in this proposal has resulted in a prescribed methodology that will satisfy the requirements of the Hanford Site permit and provide better control and management of the Hanford Site facility operating records. The three phased approach has been described and includes a draft schedule and flow chart showing the steps required for implementation of the program. Resources and issues have been identified for further consideration. It is the intent of Data Systems Development to continue working on providing a viable solution to the issues identified in the Issues Resolution Meeting of February 13, 1991. Upon approval of the proposed program Data Systems Development can provide the necessary expertise to meet the challenge.

9413139.01117

18.0 SECURITY OF HANFORD SITE FACILITY

18.1 Issue

Do the current security provisions at the Hanford Site meet the security requirements as set forth in WAC 173-303?

18.2 Resolution

The current security provisions at the Hanford Site Facility meet the security requirement as set forth in WAC 173-303.

The entire Hanford Site is a controlled access facility and is expected to remain so for the foreseeable future. The Hanford Site maintains around-the-clock surveillance for the protection of government property, classified information, and special nuclear materials. The Hanford Patrol maintains a continuous presence of armed guards to provide Hanford Site security.

Manned barricades are maintained around the clock at checkpoints on vehicular access roads leading to the Hanford Site. Access to the active portions is gained through manned barricades. All personnel entering or leaving the active areas must display a U.S. Department of Energy-issued security identification badge indicating authorization to enter the area and submit to a search of personal items carried into and out of the area. Additional entrance procedures must be followed to enter designated radiation zones. The active areas are completely surrounded by security fencing. The only openings in the security fences are barricaded and manned by armed guards on a 24-hour basis. The security fences are 8-foot-high chain link and are topped with three strands of barbed wire.

Each active area containing dangerous waste is posted with a sign, in English, reading, "DANGER-UNAUTHORIZED PERSONS KEEP OUT," in red and black letters on a white background. The signs are visible from all angles of approach, and are legible from a distance of at least 25 feet. In addition to these signs, the fences around the secured areas are posted with signs warning against unauthorized entry. The signs are visible from all angles of approach.

18.3 Concurrence

Department of Energy,
Richland Operations Office

Date

Washington State Department
of Ecology

Date

9413139.0119

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

9413139.0450

19.0 Marking of Transfer Piping

19.1 Issue

Should signs be posted at least every 50 feet along the length of any pipe carrying dangerous or mixed waste?

19.2 Resolution

Mixed waste signs will be posted at locations where an underground pipeline leaves a specified unit, where it crosses a road, where it 'bends,' and where it enters another unit. The need for mixed waste signs within the boundaries of a TSD unit will be determined on a unit-specific basis.

Information on the type of mixed waste sign, an implementation schedule for sign placement, and the status of underground piping maps will be included in Chapter 2.0 of the Hanford Site Facility Permit Application.

19.3 Concurrence

Department of Energy,
Richland Operation Office

Date

Washington State Department
of Ecology

Date

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

9413139.0151

20.0 Inclusion of Air Permits in RCRA Permits

20.1 Issue

What is the desirability of including Clean Air Act related permits in the Hanford Site Facility Permit?

20.2 Resolution

Clean Air Act related permits and approvals will continue to be developed as stand-alone documents.

The addressing of new RCRA air regulations will be "picked-up" in Notice-of-Deficiency (NOD) cycles for RCRA permit applications to be submitted to meet June 1991 Tri-Party Agreement milestones (i.e., Double-Shell Tank System, 242-A Evaporator, Liquid Effluent Retention Basins). This approach will ensure that the milestone submittal date for these units does not have to be delayed.

Further clarification will be provided by Ecology and the Washington State Department of Health and EPA as to the relationship between Clean Air Act related permits, notifications, and approvals generated pursuant to PSD, NESHAP, RAEP or other Clean Air Act related programs and RCRA permits.

Clarification of the relationship of Clean Air Act related approvals and permitting to RCRA permitting is not necessary to proceed with the initial Hanford Site Facility Permit. However, clarification efforts will continue outside the context of the development of this permit.

20.3 Concurrence

Department of Energy,
Richland Operation Office

Date

Washington State Department
of Ecology - Hanford Section

Date

Environmental Protection
Agency - RCRA

Date

Washington State Department
of Health

Date

9413139.0452

Washington State Department of Health - Air Quality Section Date

Environmental Protection Agency Date

Westinghouse Hanford Company Date

Pacific Northwest Laboratories Date

9413139.0453

21.0 Reserved

21.1 Issue

21.2 Resolution

21.3 Concurrence

Department of Energy,
Richland Operations Office

_____ Date

Washington State Department
of Ecology

_____ Date

_____ Environmental Protection Agency

_____ Date

_____ Westinghouse Hanford Company

_____ Date

_____ Pacific Northwest Laboratories

_____ Date

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Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

9413139.0456

23.0 Waste Minimization Plan

23.1 Issue

What constitutes appropriate waste minimization plan documentation for the Hanford Site Facility?

23.2 Resolution

The WAC 173-303 requirements for waste minimization plans are satisfied in the *Hanford Site Waste Minimization and Pollution Prevention Awareness Plan* (including Process Waste Assessment information) and the unit-specific waste minimization plans for each individual waste management unit. These plans will be included in the formal submittal of the *Hanford Site Facility Permit Application* (Facility permit application) (both at the facility and waste management unit level). The DOE-RL plan will have overall control if inconsistencies between plans are noted. In addition, as a requirement of the Permit, the *RCRA (HSWA) Biennial Waste Minimization Report* and the *DOE-HQ Waste Reduction Report* which provide a status on waste reduction activities at Hanford will be submitted to Ecology.

Because the cited waste minimization plan documents also serve to satisfy a broad range of other requirements (e.g. DOE Orders), revisions made to portions of these documents that are not governed by the requirements of WAC 173-303 will not be considered as a permit modification subject to review or approval by Ecology. Those portions of the waste minimization plan documents that address the requirements of WAC 173-303 will be identified in the Facility permit application.

23.3 Concurrence

Department of Energy,
Richland Operations Office

Date

Washington State Department
of Ecology

Date

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

9413139.0457

24.0 Independent Registered Professional Engineer Certification

24.1 Issue

Can a DOE contractor perform independent registered professional engineer certification?

24.2 Resolution

Certification by a registered professional engineer is required to support RCRA permitting activities at the Hanford Site Facility (e.g., tank integrity assessments, closure). Such certification, where required, will be conducted using a DOE contractor or subcontractor that has not been associated with the design, construction, operation, and/or closure of a particular TSD unit. Contractor/subcontractor engineers conducting certification will be registered within Washington State or within a state having a reciprocal agreement with Washington State.

24.3 Concurrence

Department of Energy,
Richland Operation Office

Date

Washington State Department
of Ecology

Date

Environmental Protection Agency

Date

Westinghouse Hanford Company

Date

Pacific Northwest Laboratories

Date

9413139.0458