To: Bryan Foley
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065450

January 11, 1999

In response to the request for Public Comment on the Implementation Plan for Environmental Restoration Program for Hanford's 200 Areas Waste Sites, I am enclosing my marked-up copies of the Focus Sheet and the Introduction (the only sections I requested). My specific comments are as follows:

This Implementation Plan seems to cover Requirements, Characterization, Risk Assessment, Remedial Actions, and Closure Verification for the cleanup of radioactive solid waste in the 200 Areas. The high priority given to protection of the groundwater and the Columbia River seems integrated with other Hanford environmental restoration efforts by the Groundwater/Vadose Zone Integration Plan. The basis for reduction in number of Waste Site Groups from 32 to 23 makes sense; and providing common or generic information applicable to all waste site groupings in a seperate general document is good!

I'm concerned that this Implementation Plan integrated with the total Hanford environmental restoration efforts results in a "too thorough" Hanford Restoration effort that is unsafe and very costly, and takes too long! This is only one of several national manmade nuclear waste sites -- the total effort could bankrupt our country!! I believe a realistic Hanford Cleanup is achievable in a timely, safe and cost effective manner.

My version of a "realistic Site Cleanup Plan" would go something like this:

1. Group waste sites by geographical, process, chemical and physical makeup;
2. Establish Characteristics* of each waste site group;
3. Review and assess original 1940's rad-waste disposal and safety philosophy;
4. Apply original philosophy to existing waste status and establish present and future risks;
5. Assess Government Requirements and select those applicable to Hanford conditions;
6. Re-evaluate the applicable Govt Reqts and confirm realistic for Risk, Cost and Schedule;
7. Establish the final Govt Reqts to be met; justify, document and prepare waivers;
8. Describe Remediation Action* and approve;
9. Complete Remediation Action* and verify closure of sites.
10. Perform minimal continued surveillance testing and oversight!

* Exposing waste during Characterization and Remediation actions generates much more additional waste which is released to our environment. Presently its all confined /contained ! (Except for some low-level ground foliage contamination which gets spread by its inhabitants!)

In general, we should consider the Hanford Site as having Rad-Waste in the form of: contamination confined on ground surfaces; contaminated/activated components enclosed in surface facilities; contaminated/activated solids buried underground; fission product Process Liquids stored in underground containers; and fission product components buried underground or stored in basins/cells. All of these are located in the general area adjacent to the Columbia River. If it were not for possible contamination of the River and groundwater (endangering the public and resources), the radioactive contamination could be considered very well confined as it exists! Has Hanford really been that harmful for its workers and the surrounding areas in the Columbia Basin???

NOW STANDING BACK AND TAKING A BROAD OVERVIEW OF THE HANFORD SITE IN THE COLUMBIA RIVER BASIN, WE MUST ASK:

* What Must We Prevent From Occurring?
* In What Dependable Way Can We Prevent That Occurance?
* Just How Safe Must Radiation/Contamination Levels Be?
* How Much Risk Exists After 50 Years Decay?
* How Much Risk Exists After 100 Years Decay Before Cleanup Is Completed?
* How Much Of This Contamination is Naturally Present In Our Environment?
* What Is Acceptable Risk In Re-Exposing Presently Confined Radiation/Contamination , Generating Additional Unsafe Rad-Waste, And Increasing Personnel Exposure?

LET'S ASSUME IT HAPPENS THAT EXCESSIVE RADIATION LEVELS WERE FOUND IN OUR COLUMBIA RIVER AND PUBLIC WATER SUPPLIES RIGHT NOW TODAY!!--WHAT WOULD BE THE DEPT. OF ENERGY'S ACTION?--HOW MUCH TIME WOULD WE HAVE???----THAT D.O.E. ACTION APPEARS TO BE THE APPROACH WHICH SHOULD BE TAKEN RIGHT NOW, TODAY!!

A Feasible and Realistic approach for an expeditious, integrated Hanford Cleanup (not Restoration) would be as follows:

1. Ensure all Radioactive Waste is dried up:
   * Forget about total tank cleanout and making Glass Logs!(Vitrification is a bad problem!)
   * Stir and pump out tanks in a safe and proven manner -- process the sludge and dryout the mud remaining in the tank!
   * Remove fissile components and process waste from old process areas/buildings/basins and place in surface fuel storage using safe and proven transfer/handling methods!
   * Dispose of contaminated structural and equipment items in the dried-out tanks, areas and old process buildings!
2. Cover/enclose the filled areas, tanks and buildings so rainwater can't contact contamination and leach to groundwater/Columbia River.
3. Install fences around general waste areas/buildings and declare each a FEDERAL MONUMENT (like B-Reactor).
4. This "Hanford National Manmade Nuclear Site" could contain clean public roads and areas with Federal Monuments scattered around -- each fenced for No Trespassing! --- with audio stations providing Tourist information on Site History, risks to public, etc.
5. Ensure that if existing contamination feeds into the groundwater and Columbia River, that it proceeds at acceptable rates.

I had worked at Hanford in 200 Area Tank Waste Retrieval and Solid Waste Nuclear Safety for about 6 years combined before retiring in December, 1994. Most of my concerns with past and present approaches for Hanford Cleanup (unproven, costly, unsafe and untimely) have been expressed in the form of writeups over those 6 years!! Those writeups consisted of TWRS documents, Great Ideas, Employee Concerns, etc. which should still exist. I have declined to say anything since retirement, and with my experience and interest it's been difficult! Now with the request for Public Comment, continued Tri City Herald news print, and occasional "on the street" discussions with former Peers, I've finally weakened to "speak my piece"--- again with the same concerns and proposed resolutions as 4 Years Ago.!! It seems we continue hearing so much of the same about Hanford Cleanup and seemingly, still with VERY LITTLE SIGNIFICANT CLEANUP ACCOMPLISHED!! (Reference the 1/8/99 TCH article about "Pumping of tanks still weeks away").

Thank you for considering my comments,

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Tri-Party Agreement

Focus Sheet

Environmental Restoration Program Implementation Plan for Hanford's 200 Areas Waste Sites

U.S. Department of Energy • U.S. Environmental Protection Agency • Washington State Department of Ecology

This focus sheet describes an implementation plan to assess and remediate Environmental Restoration Program soil waste sites (approximately 700 soil waste sites) located in the 200 Areas of the Hanford Site (*). These soil waste sites are potentially contaminated as a result of nuclear fuel processing and associated waste management operations, and may potentially present risk to human health and the environment. Implementation of the assessment includes two steps: 1) characterizing the nature and extent of the contamination, and 2) evaluating clean up alternatives. The U.S. Environmental Protection Agency (the Tri-Parties) are seeking public comment on the draft *200 Area Remedial Investigation/Feasibility Study Implementation Plan—Environmental Restoration Program* (DOE-RL-98-28) called the "Implementation Plan."

(*) While the Environmental Restoration 200 Areas Project is a core project in the groundwater/vadose zone integration effort, the Implementation Plan does not prescribe clean up for the waste storage tank farms in the 200 Area, tank leakage to vadose zone, other waste management programs, decontamination and decommissioning of facilities or buildings, and previously contaminated groundwater.

REQUEST FOR PUBLIC COMMENT

Public comments on the Implementation Plan will be accepted from November 30, 1998 to January 14, 1999.

The U.S. Department of Energy, Washington State Department of Ecology, and the U.S. Environmental Protection Agency (the Tri-Parties) are seeking public comment on the proposed Implementation Plan. Although there are no statutory or regulatory requirements for public review of the Implementation Plan, the Tri-Parties are seeking public input on the plan.

The 200 Areas Remedial Investigation/Feasibility Study Implementation Plan-Environmental Restoration Program document is also available at WWW.BHI-ERC.com/200Area/200Area.HTM, or may be reviewed at the public information repository located nearest you.

To request copies of the document, or to submit comments, either written or electronically, please contact:

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Or call Hanford Cleanup Toll-free, 1-800-321-2008

SITE BACKGROUND

The 200 Areas are located at the center of the Hanford Site (see map). Starting in 1943 and continuing for almost 50 years, facilities in the 200 Areas were used to separate uranium and plutonium out of irradiated nuclear fuel that was generated

uring operation of the reactors. In the process, adioactive and chemical wastes were discharged o the soil or buried in the ground around the acilities causing the soil to become contaminated.

he Implementation Plan outlines the assessment nd the clean up approach and provides background nformation for the Environmental Restoration rogram waste sites (including associated structures nd soils) that became contaminated during the fuel eparation process. The Implementation Plan also erves as the basis for future group-specific work lans that will provide more detailed planning for ndividual waste site groups.

pproximately 700 soil waste sites had been rganized into 32 geographically based operable nits for characterization. To streamline the clean p effort, the Tri-Parties organized the Environmental estoration Program waste sites into 23 waste site roupings. The groupings were based on the types f discharge (e.g. solid waste, cooling water, ranium-rich waste) and aste site types (e.g., ond, crib, burial ground). he Tri-Parties plan to use nformation collected from mited/select waste sites nat are representative of the aste groups, as well as all reatment, Storage, and Disposal nits, to make clean up decisions.

he *Hanford Federal Facility greement and Consent Order* (Tri-arty Agreement) designates waste ites as either *Comprehensive Response, ompensation, and Liability Act of 980* (CERCLA) or *Resource onservation and Recovery Act of 1976* RCRA) waste sites. The Tri-Parties gree that it would be most efficient o follow an integrated path to address ne regulatory authorities. Consequently, ne Tri-Parties are planning to use the ERCLA documentation process, modified o incorporate additional requirements of the RCRA process, to document the assessment and evaluation of clean up alternatives, and eventual clean up decisions.

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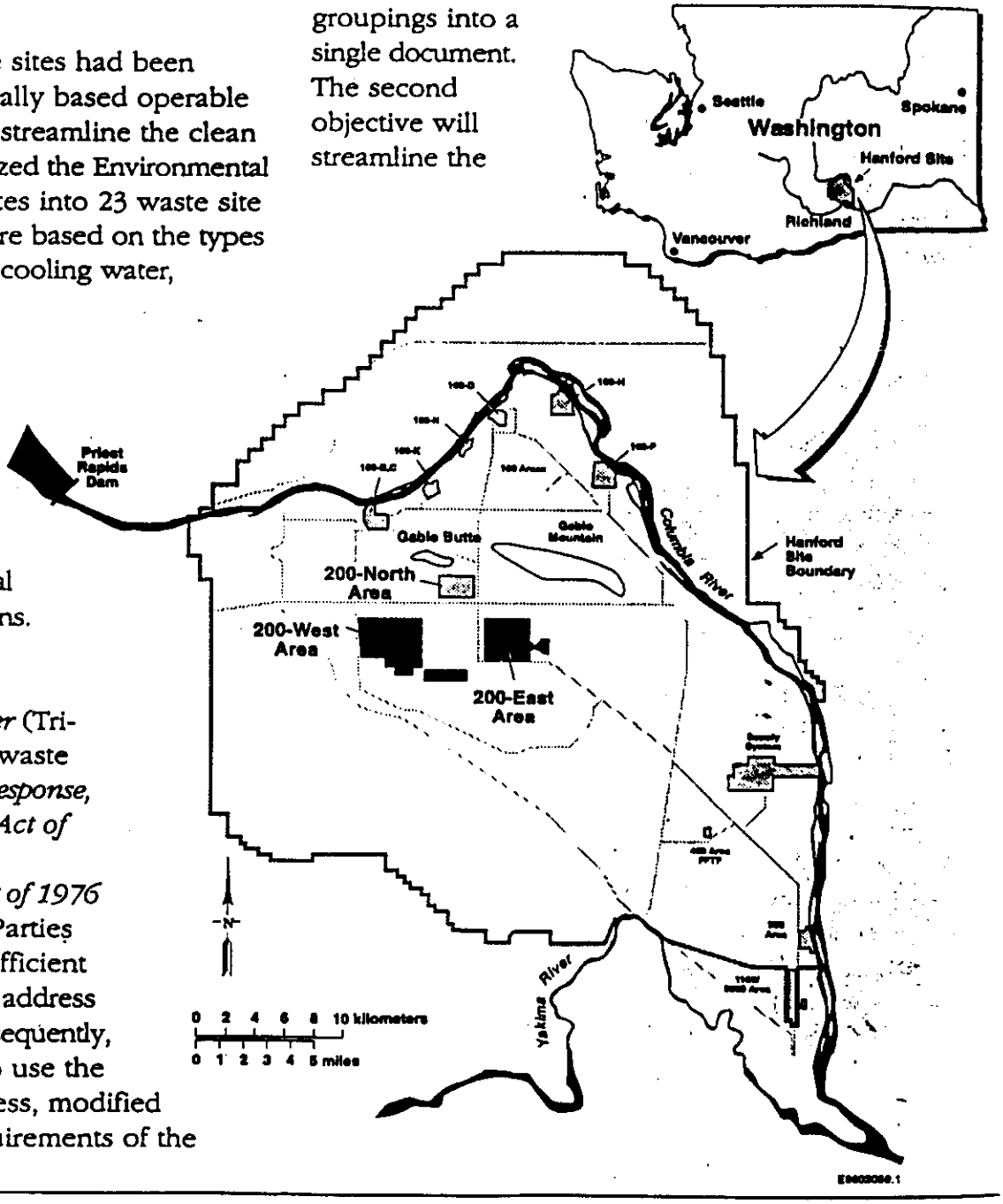
OBJECTIVES OF IMPLEMENTATION PLAN

The two primary objectives of the Implementation Plan are to 1) describe the overall regulatory and technical approach for the assessment phase of clean up, and 2) collect common or generic information applicable to all waste site groupings into a single document. The second objective will streamline the



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1/8/9

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200 Areas Remedial Investigation/Feasibility Study Implementation Plan - Environmental Restoration Program

Date Published
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United States
Department of Energy
P.O. Box 550
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For External Review

remediation activities in the 200 Areas, with modification as needed to concurrently satisfy requirements specific to RCRA corrective action for RCRA Past Practice sites and RCRA closure of treatment, storage, and/or disposal units. This integration process for the two regulatory programs is a modification and advancement over that which has been applied in the 100 and 300 Areas that incorporates improvements that have been identified.

Significant efficiencies are also achieved by reducing the number of operable units from 32 geographical-based groupings to 23 process-based, waste site operable units. Within each of these groups, representative sites will be selected, treatment, storage, and/or disposal units will be included, and the analogous site approach used to obtain characterization information. The grouping of waste sites and selection of candidate representative sites was the first step in developing a consistent characterization strategy that applies the analogous site approach used previously in the 100 and 300 Areas. These groupings can be used to focus the characterization effort on a limited number of specific waste sites that represent the group. The representative site data can then be used to make remedial action decisions for all sites within a group. Sampling of individual waste sites is expected to be required before remedial design to verify the applicability of the representative waste site conceptual model, to confirm that remedial action decisions are appropriate, and to provide data needed to design the remedy. Sampling may also be performed during or after remedial design at non-representative waste sites to verify the proper group placement. The use of the analogous site approach is critical due to the large number of waste sites that exist in the 200 Areas. Field analytical data would ultimately be required at all waste sites, but the collection of this confirmatory data will coincide with the commencement of remedial design activities. Following remediation, verification sampling will also be performed to confirm that cleanup goals have been achieved.

The Implementation Plan also streamlines work plans that are required for each waste site group by consolidating background information and providing a single referenceable source for this information. This allows the information in the group-specific work plans to focus on waste group or waste site-specific information. The background information includes an overview of the 200 Area facilities and processes, their operational history, contaminant migration concepts, and a list of contaminants of concern. It also documents and evaluates existing information to develop a site description and conceptual model of expected site conditions and potential exposure pathways. With this conceptual understanding, preliminary potential applicable or relevant and appropriate requirements, preliminary remedial action objectives, and remedial action alternatives are identified. The alternatives are broadly defined but represent potential alternatives that may be implemented at the site. The identification of

potential alternatives helps ensure data needed to fully evaluate the alternatives are collected during the remedial investigation. The type and quality of data are defined through the DQOs and form the basis for the data collection program.

The strategy for implementation of the DQO process and definition of characterization requirements is critical. Flexibility is needed in these activities to account for the differences in site-specific waste site groupings. The Implementation Plan contains a summary of the group-specific work plan process to establish DQOs, followed by a description of the analogous site approach to characterization and a description of characterization techniques that have been used at the Hanford Site.

The Implementation Plan also specifies project management activities, and includes a project schedule. Appendices provide supporting information that is applicable to all waste site groups in the 200 Areas. These sections include the general elements of quality assurance, health and safety, data management, and remedial action technologies that may be referenced and/or expanded upon in future characterization work plans. These appendices provide a foundation to ensure that future work plans are focused on the group-specific details and not the 200 Areas-wide discussions and requirements.

This 200 Areas strategy recognizes the interrelationships between the various activities in the area and the need to integrate with other Environmental Restoration and Hanford project/programs. The plan describes the approach to interfacing with other programs and agencies, the integrated schedule of activities that addresses both RCRA and CERCLA program requirements, and the public participation process.

TABLE OF CONTENTS

conditions present and realizing that waste site-specific details are to be addressed in work plans. Because additional efficiencies are expected to be seen as the first characterizations are completed, a degree of flexibility is provided to accommodate future improvements.

1.1 GENERAL OVERVIEW OF 200 AREA ASSESSMENT AND REMEDIATION APPROACH

Figure 1-2 provides an overview of the assessment and remediation process that will be followed in the 200 Areas. This includes preparation of documentation (work plans and RI/FS reports), sampling, analysis, evaluation of data, preparation of proposed plans, issuance of Record of Decisions (ROD) and RCRA permit modifications, remediation activities, and final closeout of waste sites. This process is explained in further detail in the remainder of the sections of this document, beginning with the development of an integrated regulatory approach.

A regulatory framework is needed that integrates the RCRA, CERCLA, and *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) (Ecology et al. 1994) requirements into one standard approach to direct cleanup activities in a consistent manner and to ensure that applicable regulatory requirements will be met. Consistency is desired because it facilitates the preparation, review, and approval process, and focuses the effort on achieving the end product rather than on the process. The framework must be sufficiently complete such that all assessment and remediation steps are addressed with an emphasis on near-term needs for characterization.

Similar to regulatory requirements, a common approach is needed to ensure consistency in defining characterization requirements for the various waste groups (i.e., source operable units). Important components in developing the characterization framework include the data quality objective (DQO) process, data collection strategy and methodology, and use of the analogous site approach. As part of the work planning process, assumptions are made regarding the conceptual model, applicable or relevant and appropriate requirements (ARARs), remedial action objectives (RAOs), and remedial action alternatives because they may influence characterization requirements. For example, the identification of preliminary remedial alternatives helps ensure that data needed to evaluate the alternatives are collected. These types of initial assumptions are not expected to vary considerably between work plans and can be defined early in the assessment process to promote a consistent characterization approach.

The consolidation of 200 Area-wide information was identified as an important streamlining element that is intended to simplify future documents (e.g., work plans, closure plans) and to bring together the significant amount of available 200 Area information. Work plans in the past required generic, as well as site-specific or operable unit-specific, information. Generic information included background information about the Hanford Site or NPL site that was repeated in work plan after work plan. A significant amount of historical information on the 200 Areas has been generated over the years. However, the information is often scattered among various types of reports, plans, or drawings. As a result, the need exists to consolidate background and historical information in a single reference. By compiling these types of materials early, work plans need only focus on group-specific or site-specific details.

A determination on how to best organize waste sites in the 200 Areas was the focus of the *Waste Site Grouping for 200 Areas Soil Investigations* report (DOE-RL 1997). It was concluded that 23 process-based groupings would be a more efficient approach to characterization than the existing 32 geographically based source operable units. The selection of these 23 waste groups is based on the type of discharge (e.g., solid waste, cooling water, process water, uranium-rich waste) and waste site type (e.g., pond, crib, ditch, burial ground). Table 1-1 identifies the 23 waste groups. These waste groups formed

- Appendix E, Waste Management for the 200 Areas Implementation Plan, which describes the general waste management processes and requirements for waste types that might be generated during the course of assessing 200 Area waste sites. Activity-specific waste control plans will be prepared as necessary to identify the specific type, volume, and disposal of wastes.

Section 3.0 summarizes the 200 Area physical setting (Section 3.1) , provides an overview of the operational history of the 200 Areas, and identifies major potential contaminants of concern (Section 3.2). Detailed discussions of these subjects in provided in Appendices F, G, and H, which include the following:

- Appendix F, Physical Setting, includes the general 200 Area topography, meteorology, vadose zone hydrogeology, and groundwater. It also presents natural background concentrations of chemical and radiological analytes and discussions on environmental and cultural resources of the 200 Areas. These data support both the preliminary physical conceptual model and the conceptual exposure model in demonstrating how contaminants are expected to move through the environment and to potential receptors. This section also promotes an understanding of the constraints and adjustments to characterization activities. These details are intended to supplement the summary information presented in Section 3.1. This information will be referenced as needed in future group-specific work plans.

- Appendix G, Waste Site Listing, tabulates all of the 200 Area waste sites included in the scope of this Implementation Plan. It also provides a detailed explanation of each waste site group. Representative waste sites for characterization activities are identified in Table G-1. In addition, information on the history, engineering, and operational features of each various type waste site is presented. This appendix thus summarizes the types of waste streams and waste sites which, in turn, supports understanding of both the waste site groupings and the physical conceptual model. These details are intended to supplement the summary information presented in Section 3.2. This information will be referenced as needed in future group-specific work plans.

- Appendix H, Process Descriptions and Flow Diagrams, describes the organization and historical evolution of the chemical separation processes and waste management activities in the 200 Areas. A series of figures are used to help illustrate the complexities of the major processes undertaken in the canyon buildings, evaporators, and support facilities around the major processing plants. This appendix demonstrates the origin and range of radionuclides in waste streams and shows why certain radionuclides are not considered as analytes. This discussion demonstrates the connection/similarities between processes on site, the resulting similarities in waste stream chemistries/contaminants, and the general interconnectedness that allows waste sites to be grouped. This information is also intended to supplement the summary information presented in Section 3.2.

Finally, Section 3.3 discusses the physical and chemical interactions that may occur when waste is introduced to the soil column including the fate and transport of contaminants, and summarizes the results of previous soil investigations in the 200 Areas. This is used to form a conceptual understanding of contaminant migration in the vadose zone for major contaminants of concern. Section 3.0 and supporting appendices are intended to be sufficiently comprehensive to satisfy the general information requirements of upcoming group-specific work plans and consolidate a large number of diverse references in a readily available primary document.

A recommended outline for group-specific work plans that incorporates the streamlining elements discussed above is provided in Appendix I. Plates I through III identify the locations of the waste sites, by waste group, and also highlight those that are representative sites or TSD units.

1.2.4 Baseline Assumptions

Several components of the work-planning process function as guiding assumptions to the cleanup process. These assumptions are established early in the process, at least in a preliminary manner because they influence characterization needs. Those assumptions that can be addressed early in the process and are not expected to vary considerably among work plans include ARARs, the conceptual exposure model, RAOs, remedial action alternatives, and risk assessment approach.

ARARs capture those regulatory requirements that are pertinent to the cleanup process. Because ARARs form the basis for establishing cleanup levels, the characterization effort (e.g., detection limits) must be compatible with those requirements. A listing of the ARARs considered important to the 200 Areas is included in Section 4.0. Specific ARARs that may change due to site-specific conditions such as land use, exposure pathways, and remediation goals will be addressed in the group-specific work plans.

Section 5.0 develops a preliminary conceptual exposure model that integrates the waste site categories (source terms) identified in Section 3.2, general contaminant transport phenomena presented in Section 3.3, and land-use considerations with potential exposure pathways and receptors to provide a basis for evaluating current or potential future risks. These risks are then addressed by preliminary RAOs and preliminary remediation goals (PRGs) that are protective of human health and the environment. Based on the RAOs, viable remedial action alternatives are assembled in Appendix D. The remedial alternatives are general and cover a range of technologies to reflect the potential contamination conditions present in the 200 Areas. Appendix D is intended to satisfy the requirements of a screening phase feasibility study (FS) (i.e., Phase I and II FS) by providing the necessary basis to prepare group-specific detailed FSs. Site-specific refinements of the alternatives presented in Appendix D will be made in final group-specific FSs. By completing a screening-level FS in Appendix D and identifying viable alternatives now, a more streamlined RI/FS can be performed. Characterization needs can be more focused if a range of expected remedial alternatives are identified early, and treatability testing needs can also be evaluated and implemented early in the process. The final group-specific FS can then be focused on the detailed analysis of a few viable alternatives.

Sections 4.0 and 5.0 are intended to satisfy work plan requirements for ARARs, the conceptual exposure model, and preliminary RAOs and remedial action alternatives. As such, these subjects will be referenced in future work, although some refinement may be needed based on group-specific conditions.

1.2.5 Characterization Approach

Use History, geog, proces, half life, to ensure / into gr / water + / put fence / down

A consistent framework for defining characterization needs for each of the waste site groups is a critical element to a more streamlined cleanup process. Important components of this framework include the following:

- Integration of past practice and RCRA TSD unit characterization needs into a single approach. (addressed in Section 2.0)

- Grouping of waste sites based on historical process information and waste site type (ponds, cribs, burial grounds, etc.) (addressed in Section 3.0)

- Prioritization of waste groups according to both technical and administrative criteria (addressed in Section 3.0)
- Development of a preliminary conceptual exposure model (addressed in Section 5.0)
- Recognizing that ARARs, RAOs, and remedial alternatives may influence characterization needs (addressed in Sections 4.0 and 5.0)
- Consistent uniform process of developing DQOs with a team composed of representatives from DOE, EPA, Ecology, and support contractors
- Application of the analogous site concept supported by a phased approach to data collection
- Use of proven characterization methodologies.

The first four bullets lay the foundation for establishing characterization needs and were discussed previously. The last three bullets focus on specific aspects of the characterization approach for waste sites and associated soil contamination (i.e., source term) and are addressed in Section 6.0.

Section 6.0 establishes the process that will be used in group-specific work plans to establish DQOs. This is followed by a description of how characterization for all waste site groups will use the analogous site approach, which focuses characterization efforts on a limited number of specific waste sites that best represent the group. The representative site data will then be used to make remedial action decisions for all sites within a group. A phased approach to data collection is defined that acknowledges the need to sample all waste sites to confirm that remedial action decisions, based on the analogous site approach, are appropriate, as well as providing data needed to design and implement the remedy. Following remediation, verification sampling will be performed to confirm that cleanup goals have been achieved. This phased approach to data collection allows for more efficient use of available resources. This framework provided in Section 6.0 serves a common starting point that will result in consistent data sets for consistent remedial decision making throughout the 200 Areas and to ultimately support site close-out and cumulative effects analyses.

1.3 PROJECT MANAGEMENT AND INTEGRATION

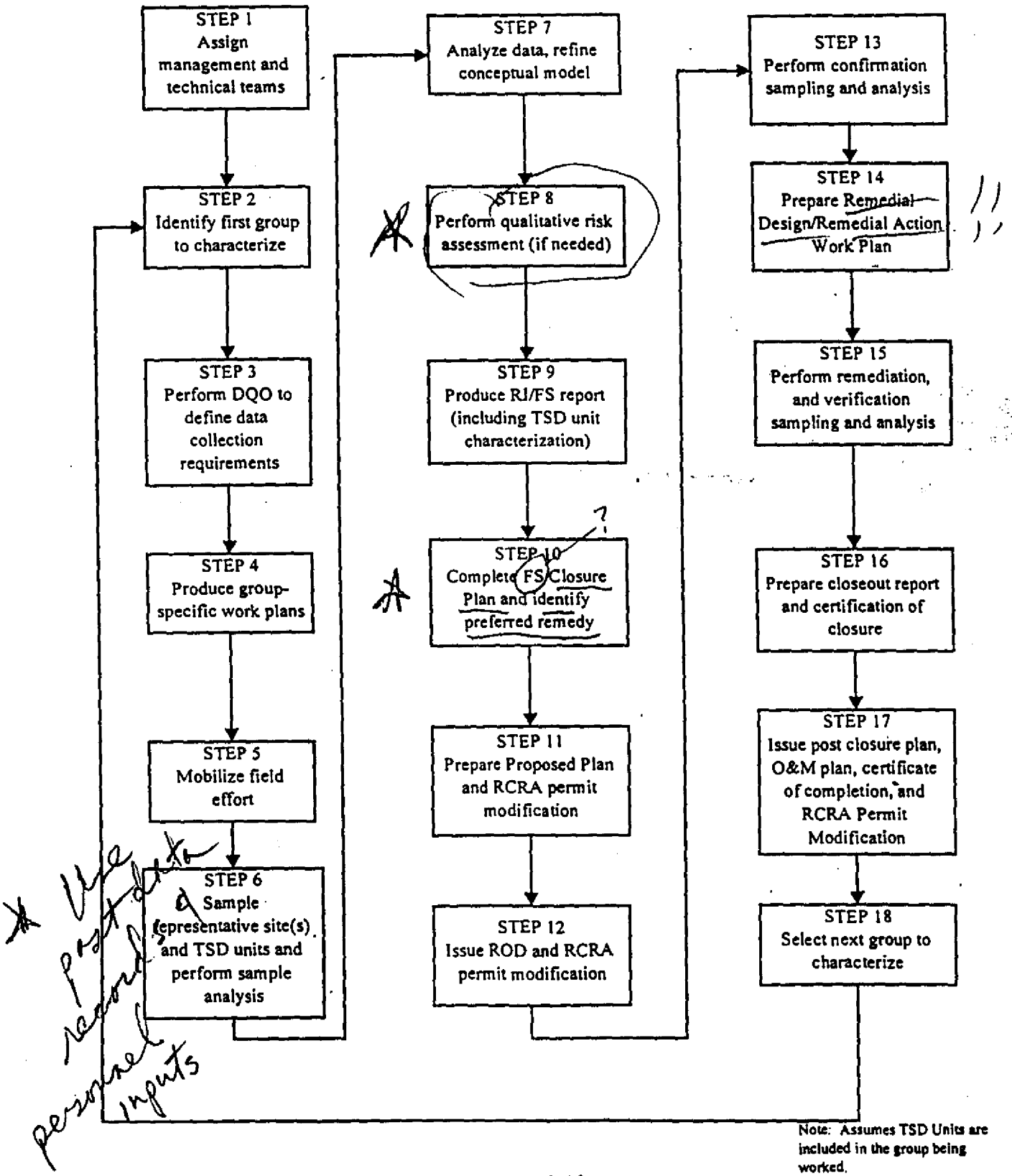
The objectives of project management during the implementation of the RI/FS plans are to ensure the safety of the work force and the affected environment, direct and document project activities, ensure that data and evaluations meet the goals and objectives of the project, and to administer the project within budget and schedule. Section 7.0 describes the approach to management of the 200 Area remediation project, the current project schedule, and the public participation process. As group-specific tasks are defined during the work planning process, task-specific project management plans will be prepared, as needed.

Section 7.0 also contains a discussion of programmatic integration needs with respect to programs inside the ER project, as well as other non-Environmental Restoration Contractor (ERC) programs involved in the 200 Areas. This aspect to project management is necessitated by the diversity of activities (e.g., groundwater pump and treats and tank waste remediation) in the 200 Areas. Although each of these programs has its own unique mission and functions independently, there are also commonalities and shared objectives (e.g., cleanup) that can be integrated to enhance overall effectiveness. In recognition of the diversity of activities on the Hanford Site and the high priority placed on the protection of

groundwater and the Columbia River, the DOE has established the Groundwater/Vadose Zone (GW/VZ) Integration Project. The GW/VZ project is responsible for integrating all activities, in various DOE programs, associated with characterization and cleanup activities of the vadose zone and groundwater on the Hanford Site, and protection of the Columbia River. The *Management and Integration of Hanford Site Groundwater and Vadose Zone Activities* (DOE-RL 1998a) report, describes the GW/VZ Project team approach for (1) achieving effective integration of current and planned site-wide activities and (2) sustaining management control of that integration. The 200 Area soil assessment and remediation work addressed by this Implementation Plan is one portion of the ER project that will interface with the GW/VZ Project.

Although groundwater contamination is an essential component of any source term evaluation and impacts to groundwater from vadose zone contamination will be assessed as part of the 200 Area waste site characterization effort, the implementation of groundwater remedial actions is managed under the Environmental Restoration Project's Groundwater Remediation Project. One situation where integration is required pertains to RCRA TSD units where groundwater must be addressed as part of a waste site's closure plan. Because of these kinds of interrelationships, DOE has created the GW/VZ Integration Project. This Implementation Plan outlines how assessment and remediation activities will be performed at 200 Area waste sites assigned to the ER program and, as such, will serve as an important coordinating document to support GW/VZ Integration Project efforts.

Figure 1-2. General RCRA/CERCLA Past Practice Waste Site and RCRA TSD Unit Process Flow.



Note: Assumes TSD Units are included in the group being worked.