Attachment 15

Decommissioning Work Plan
"Berm Removal for 183-H Solar Evaporation Basins
January 16, 1991, Rev. A-0

DECOMMISSIONING WORK PLAN

Hanford Restoration Operations

183-H Solar Evaporation Basin System

BERM REMOVAL FOR 183-H SOLAR EVAPORATION BASINS

1.0 PURPOSE

The purpose of this procedure is to systematically remove, sample, characterize and dispose of soils that form the above grade berm around the 183-H Solar Evaporation Basins. Part of the initial work will also include an investigation of soil contamination between the northeast corner of basin No. 1 and monitoring well 199-H4-3. This investigation will consist of two parallel trenches excavated perpendicular to the basin corner/well line. Soil sample data collected in these excavations will be used to confirm or disprove a theory that the contamination noted in well 199-H4-3 was from a surface water wash out of spilled material from the northeast corner of basin No. 1. These two excavations will be backfilled with the excavated materials to preclude preferential pathways for natural precipitation infiltration.

See Figure 1 for specific locations of the affected berm material and trenches.

2.0 IMPACT LEVEL

The Impact Level of this activity is 3.

3.0 SPECIAL EQUIPMENT

The following list is not meant to be all inclusive, but is to indicate some of the special equipment that may be necessary to perform this work.

- Front end loader/Backhoe (or similar)
- Dump truck
- Visqueen (or similar)
- Aerospray 70A Binder and application equipment
- Sampling spoons, bowls, and jars as listed on Attachment 3.

4.0 HEALTH AND SAFETY REQUIREMENTS

4.1 Radiological Controls

- WHC-CM-2-14, Hazardous Materials Packaging and Shipping
- WHC-CM-4-10, Radiation Protection
- WHC-CM-4-11, ALARA Program

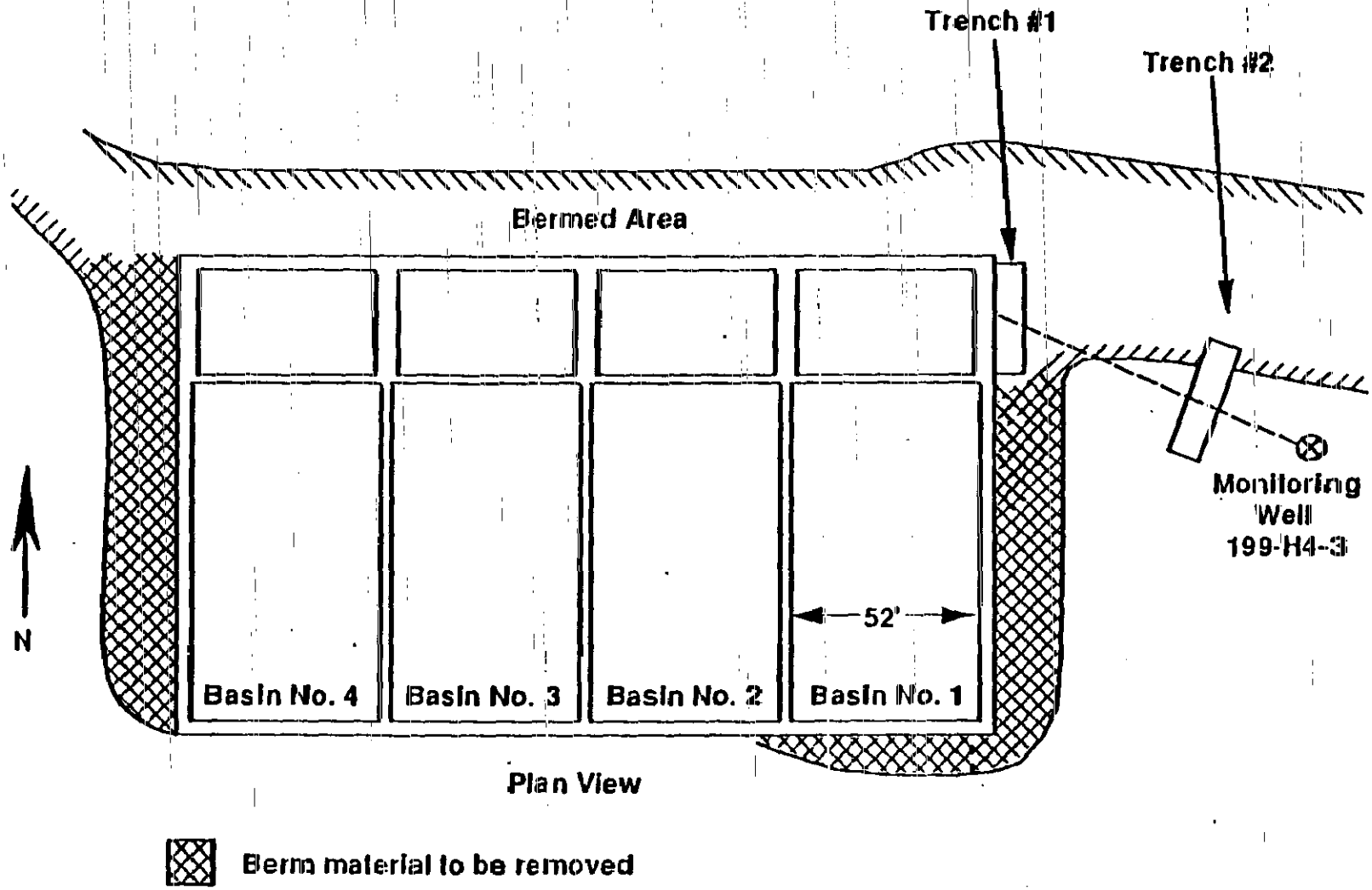


Figure 1. Plan View.

4.0 HEALTH AND SAFETY REQUIREMENTS (Cont'd)

- WHC-CM-4-13, Operational Health Physics Procedures Manual
- If radioactive soil contamination is encountered, a Radiation Work Permit (RWP) will be prepared for this project.

4.2 Environmental Controls

- WHC-CM-7-5, Environmental Compliance Manual

4.3 Industrial Safety

- WHC-CM-4-3 Volumes 1 and 2, Industrial Safety Manual. All work under this DWP will be performed in accordance with a Job Safety Analysis specifically prepared for this activity.
- WHC-CM-7-7, Environmental Investigation and Site Characterization Manual

4.4 Other Requirements

- WHC-CM-6-7, Quality Assurance Plan
- WHC-CM-7-7, Environmental investigation and Site Characterization Manual
- WHC-IP-0136, Decontamination and Decommissioning Records Control Procedure

5.0 PREPARATORY WORK

Prior to actual berm removal and sampling, the following preparatory tasks should be completed. Hanford Field Operations (HFO) shall coordinate all activities and be the point of contact for all operations.

5.1 Perform and document a walkthrough radiological (beta-gamma) survey of the berm areas shown on Figure 1. A copy of this survey shall be sent to the cognizant engineer one week prior to the scheduled start of work.

5.2 Clear four storage areas in a convenient location to the east of the basins. Each storage area should be approximately 45 ft by 25 ft and the ground surface covered with visqueen (or similar 8 mil plastic sheeting) prior to placing the berm soil on it. There shall be a 20-foot buffer zone between storage areas to prevent possible cross contamination. It is recommended that the visqueen/plastic be placed immediately prior to the berm soil placement so as to prevent wind damage.

6.0 SOIL SAMPLING AND BERM REMOVAL

Step 6.6 may be performed at the discretion of the Field Team Leader (from the Technical Baseline Section and as identified in the Field Notebook) when the perimeter soil in question are nearly exposed. Sampling will consist of sample points determined on both a random and an authoritative basis. It is not necessary that all perimeter soil samples be taken at the same time, but rather, it is vital that the sample be taken prior to disturbing the area identified in the Closure Plan as a perimeter soil sample point.

6.1 Quality Control (QC) requirements for this effort as well as required analyses are included as Attachments 1 and 2. All sampling work shall be in accordance with the requirements of these attachments.

6.2 Obtain soil samples from the near surface soils (i.e., 2 to 6 in. of the surface and within 12 to 18 in. of the basin wall) at the locations shown on Figure 2. Identify these samples as Lift No. 1.

6.3 When the field team leader has completed sampling in a given area, remove approximately 2 ft of soil from the berm as shown on Figure 3. The approximate dimensions of the resultant pile, as well as all subsequent piles, should be approximately 20 ft by 40 ft by 3.5 ft deep and identified as "Lift No. 1".

6.4 Smooth the surface of this pile using the available heavy equipment and spray the surface with Aerospray 70A Binder per the manufacturer's recommendations.

6.5 Repeat steps 6.2, 6.3, and 6.4 to sample and remove the next lift as indicated on Figure 3. Samples (as shown on Figures 4, 5, and 6) and the soil piles from this and subsequent performances of this step shall be identified sequentially (lift No. 2, No. 3, No. 4, etc.). At no point should the excavation go below the bottom elevation of the basin floor, this elevation is the desired endpoint for all work covered by this decommissioning work plan (DWP) except as listed in step 6.6 for perimeter soil samples.

6.6 Collect "Perimeter Soil Samples" per the following excerpt from DOE/RL 88-04 Closure/Post Closure Plan 183-H Solar Basins, Rev. 2, dated April 13, 1990.

6.6.1 Soil samples will be collected adjacent to the exterior surface of the basin walls at six randomly selected locations, two along each for the east, south, and west sides of the 183-H SEB. The linear sampling grids and the randomly selected sampling locations are shown in Figure 7. These sample points were selected by the random selection process. If required, the sampling personnel have the discretion to collect the samples within 1/2 grid space (5 ft) from the randomly selected sample points. The point identified by an asterisk (*) on Figure 7 will also have a vertical profile developed through this effort. See Figure 8 for this vertical profile.

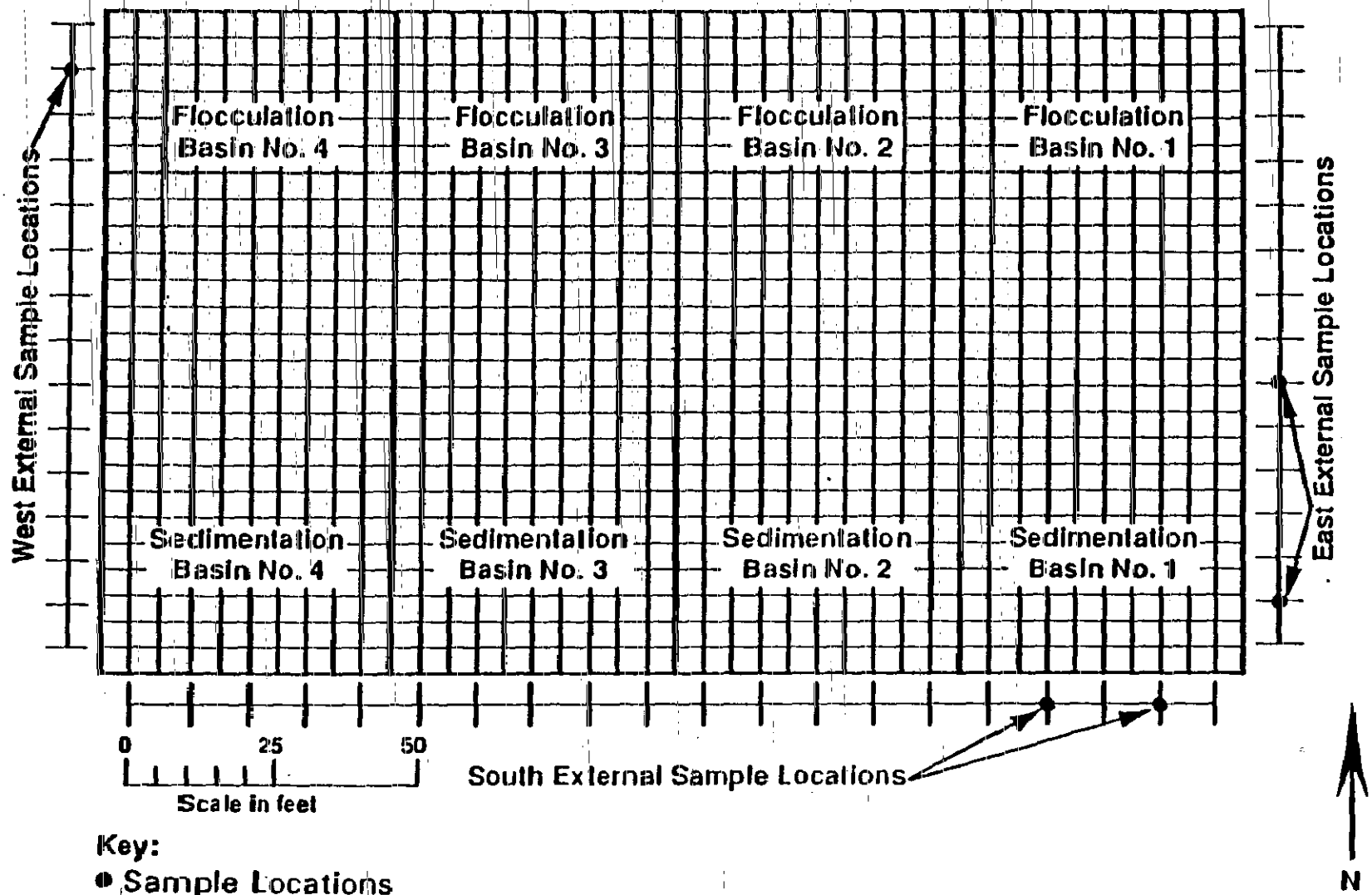
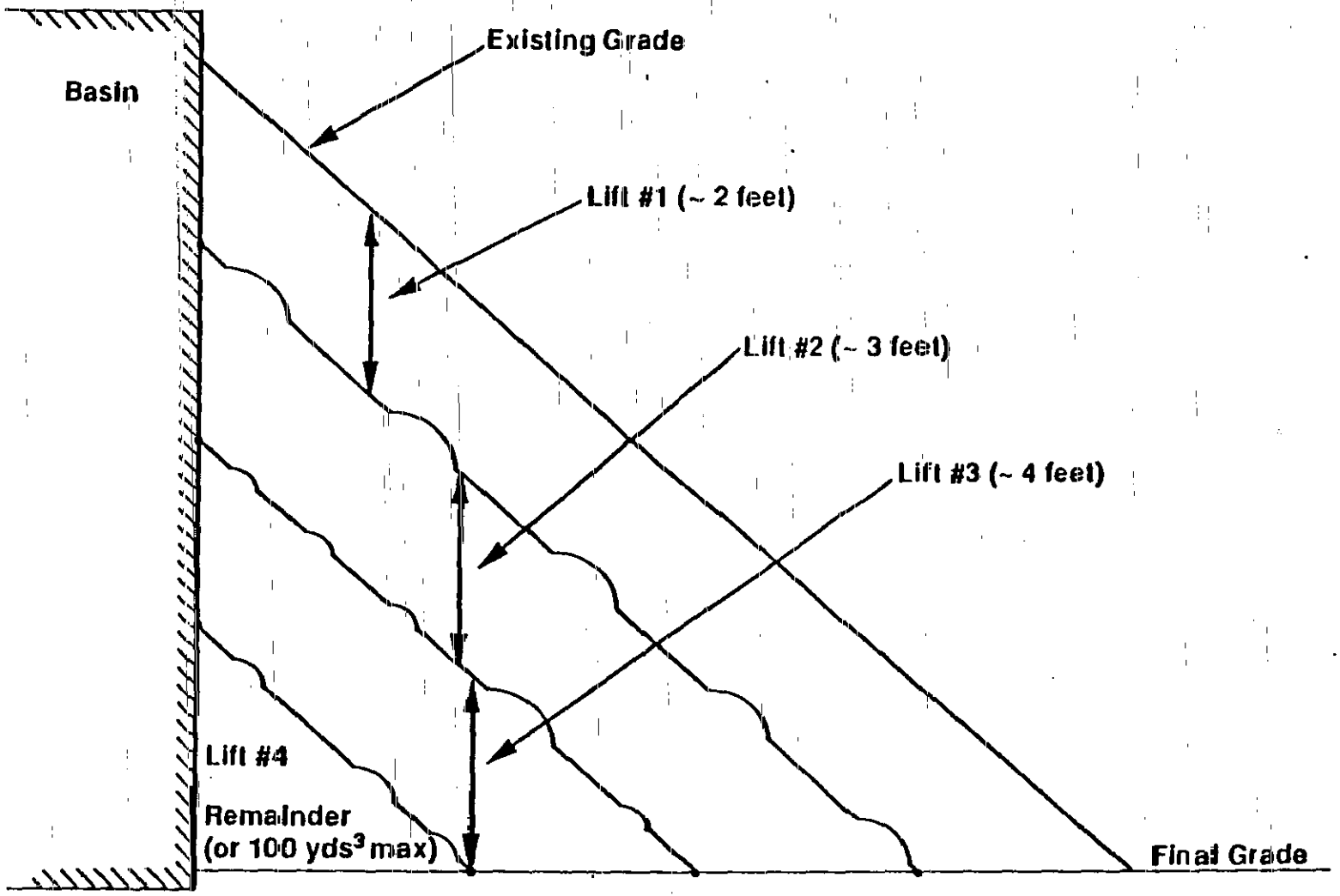


Figure 2. Lift No. 1 Sample Locations.



Note: Dimensions may vary; each lift is limited to ~100 yd^3; sketch is for guidance only.

29011040.4

Figure 3. Lift Profile Sketch.

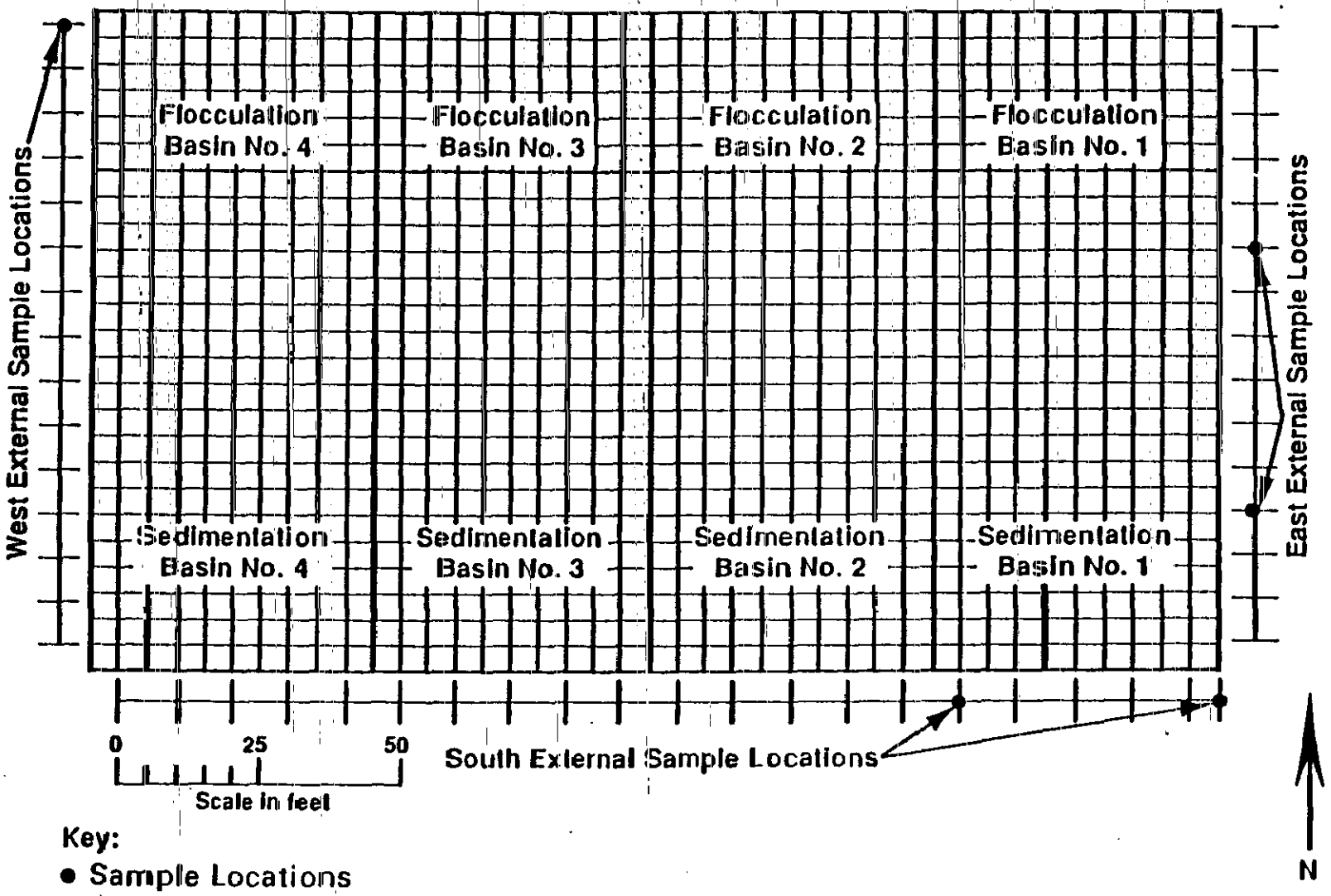


Figure 4. Lift No. 2 Sample Locations.

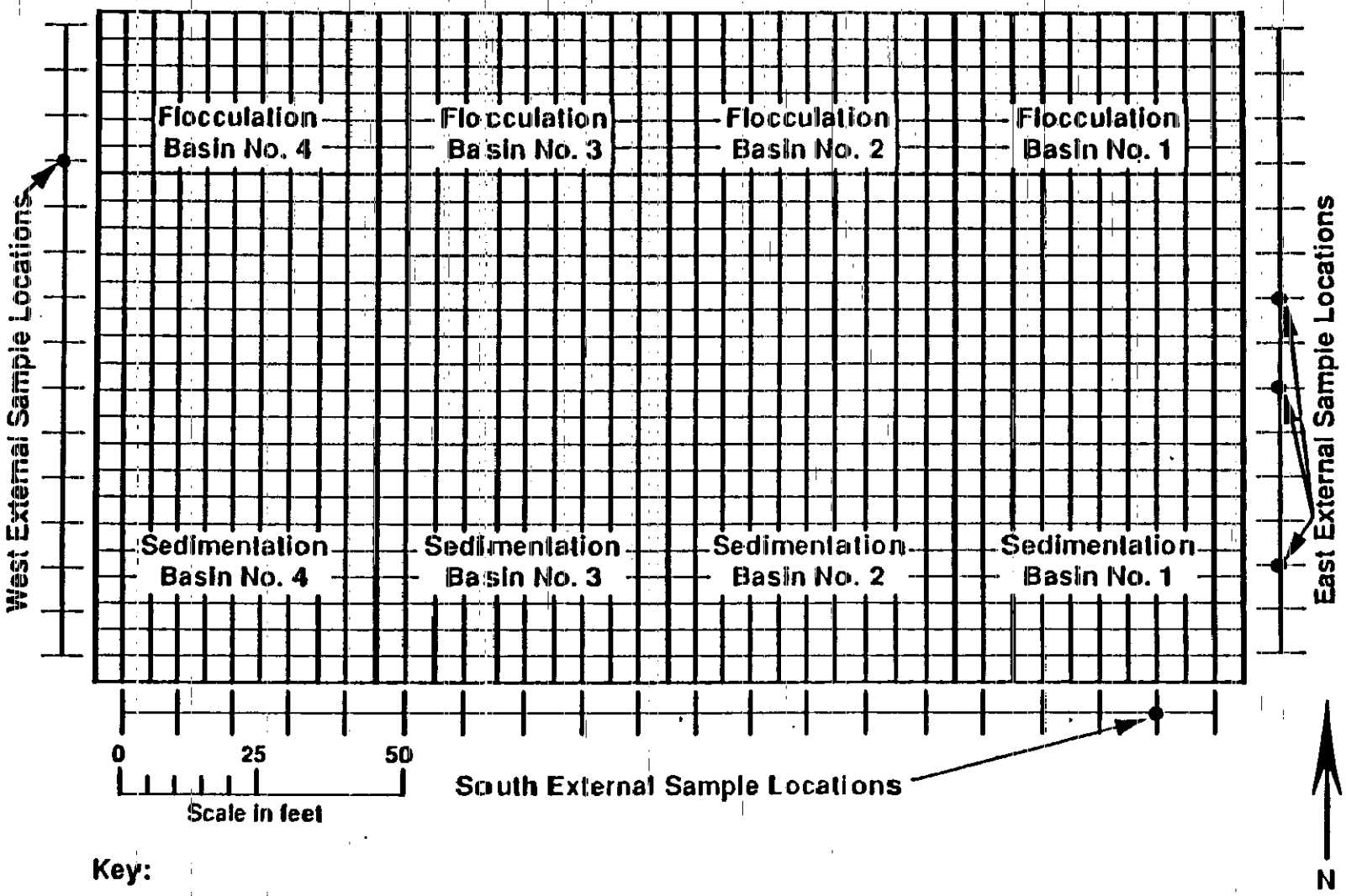


Figure 5. Lift No. 3 Sample Locations.

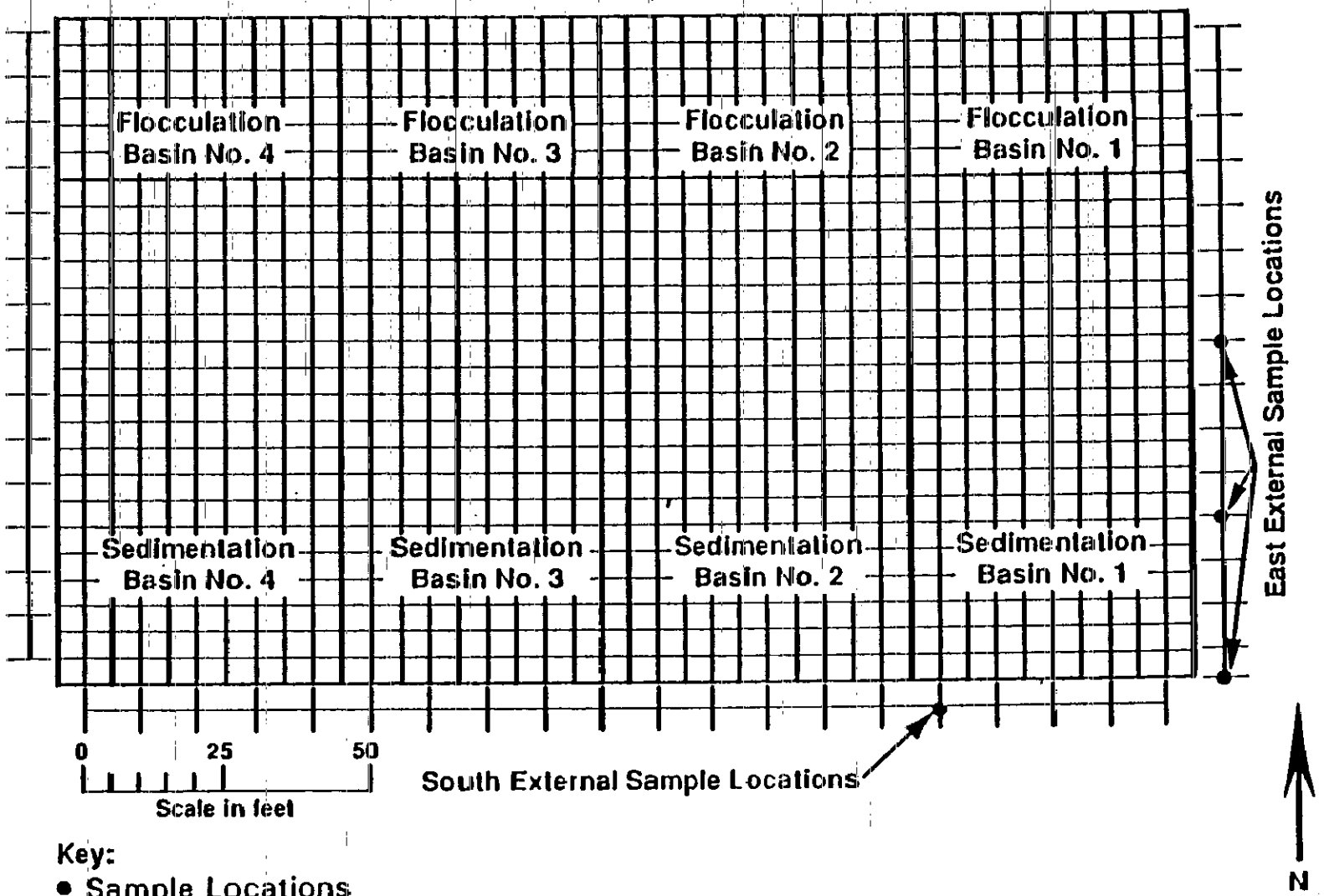
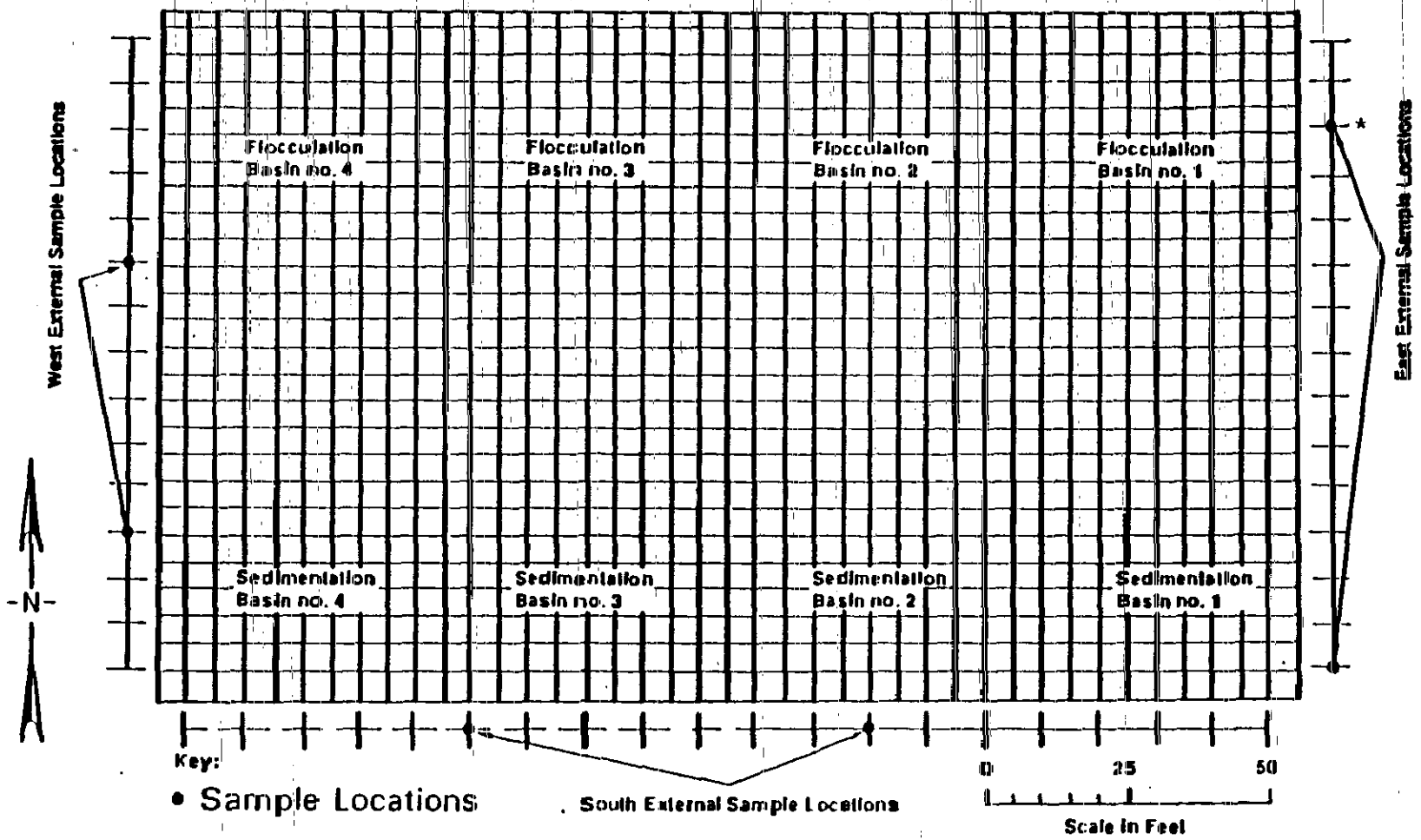


Figure 6. Lift No. 4 Sample Locations.



Transect Spacing
10' Horizontal

* Vertical Profile Sample
(see Step 7.3)

Figure 7. Perimeter Soil Sampling Locations.

The north, east, west, and part of the south sides of the 183-H SEB have soil bermed against the outside of the basin walls (see Figure 1). The berm on the north side of the basins is more extensive and will be sampled during Phase II with a drill rig. At each sampling location on the east and west sides, two soil samples will be collected. The first will be collected adjacent to the outer surface of the wall, at a height approximately 3 ft above the base of the wall. At each location, a second sample will be collected at the interface between the base of the concrete wall and the asphalt paper layer. These are the Closure Plan required samples in addition to the vertical profile sample discussed earlier. At each sampling location on the south side of the 183-H SEB (where there isn't a berm), one soil sample will be collected 6 in. beneath the base of the basin overflow structure.

The 183-H SEB's perimeter soil samples will be obtained, screened, and stored as described in Attachment 3. All of the soil samples and blanks will be analyzed for the parameters listed in Attachment 2. All soil samples will be field-screened for volatile organic compounds and monitored with hand-held instruments for gamma radiation. The readings will be recorded in the field sampling (logbook) record.

Access to the sample locations will be provided by external backhoe excavation. Due to the possibility of old foundation or basin floor structures being present on the west and south sides of the basins, additional concrete coring may be required to provide access to the underlying soil. If required, this will be done in the same way as the basin floor coring and may require modification of the Job Safety Analysis (JSA) prepared for this work. The soil excavations will be backfilled, when necessary, with the excavated material to preclude preferential pathways for natural precipitation infiltration.

6.7 Repeat step 6.5, as necessary to excavate down to the basin floor elevation for the area identified as berm on Figure 1. If more than four lifts are necessary, repeat step 5.2 for additional storage locations and reuse the sample locations identified in Figure 2, then Figures 4, 5, and 6, if necessary.

7.0 TRENCHING INVESTIGATION AND SAMPLING

As shown on Figures 1, 8, and 9, two trenches will be dug to approximately 16 ft deep and 20 ft long. These trenches will be dug under the direction of the Field Team Leader who will direct when and were the samples will be taken as outlined below. Steps 7.1 through 7.5 shall be repeated to collect samples from both trench locations.

NOTE - All samples taken greater than 3 ft below grade shall be taken from the backhoe bucket so that personnel entry into the trench is not required.

7.1 The QC requirements for this effort as well as a copy of the required analyses are included as Attachment 1 and 2. All sampling work shall be in accordance with the requirements of these attachments.

7.2 Decommissioning Engineering will lay out the trench locations in the field (similar to Figure 1). Horizontal distances from the northwest corner of each trench to the northeast corner of the concrete of basin No. 1 will be provided to the Field Team Leader for inclusion in the Field Logbook. Hanford Field Operations shall then provide a laydown area immediately to the east of each trench. This laydown area will consist of a visqueen (or similar) covered area about 30 ft wide and extending approximately 10 ft past both ends of the trench. These dimensions are approximate and should be field determined as necessary. The covering should be placed immediately prior to the start of excavation to prevent wind damage.

7.3 The field team leader shall coordinate with the equipment operator to sample from bucket so that a vertical matrix of samples is taken as shown in Figure 8 (or 9). For trench 1 only, the Field Team Leader shall identify existing grade (shown in Figure 8), by measuring down form the top edge of the concrete of the basin to the existing grade. this distance shall be recorded in the Field Team Leader's notebook.

All samples from the same elevation, with the exception of those marked with an asterisk on Figure 8, should be homogenized to provide one composite sample for analysis. The Field Team Leader may forego compositing and provide individual samples for analysis if visual observations or onsite screening (radiological or chemical) indicate contamination in a particular area or elevation.

7.4 All soils removed from the trenches shall be temporarily stored on the prepared laydown area. Add additional area as needed.

7.5 When all samples listed on Figure 8 (or 9) have been collected, and at the direction of the field team leader or cognizant engineer, the trench shall be backfilled with the soil from the laydown area.

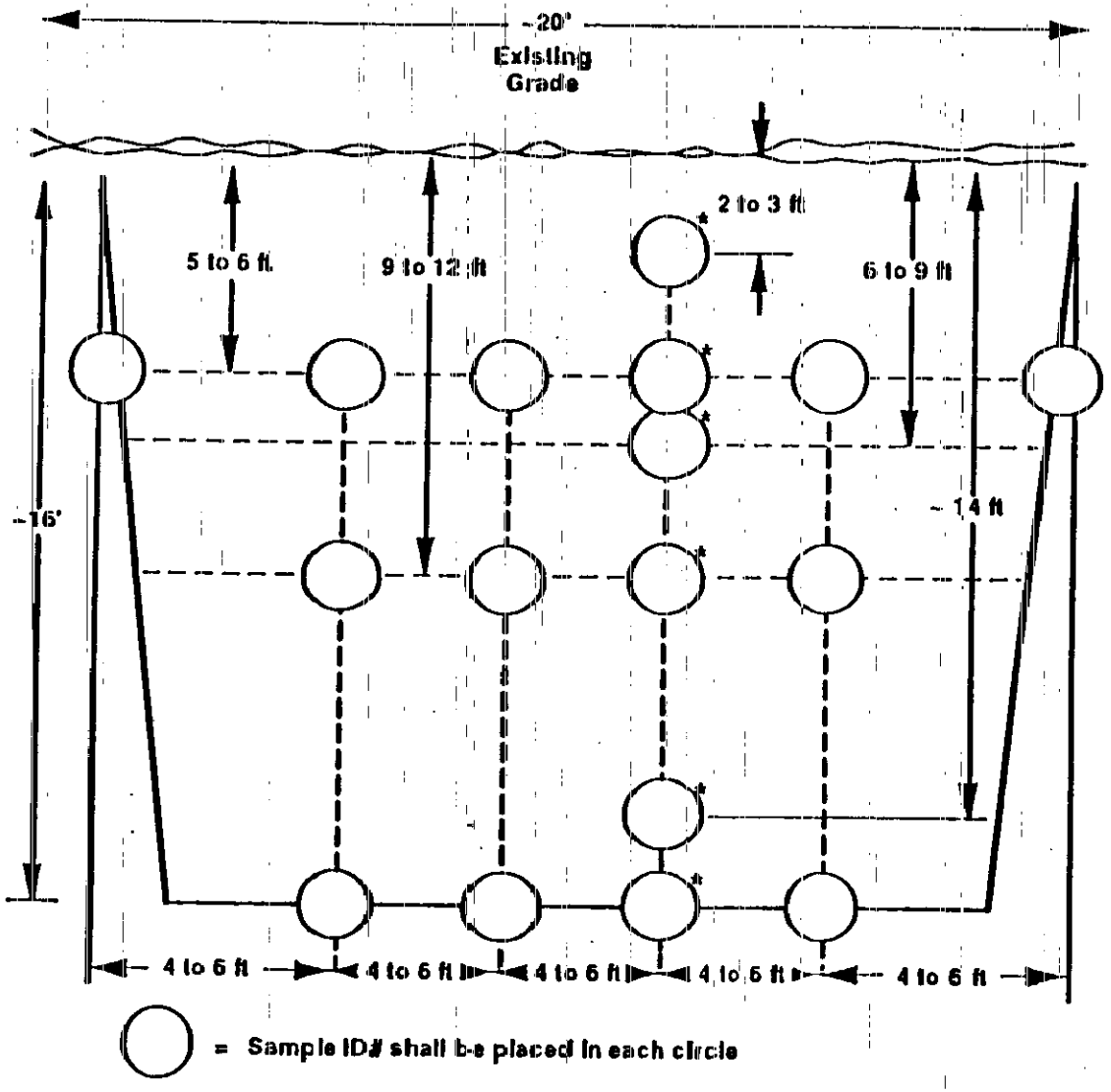


Figure 8. Trench No. 1 Vertical Sample Profile.

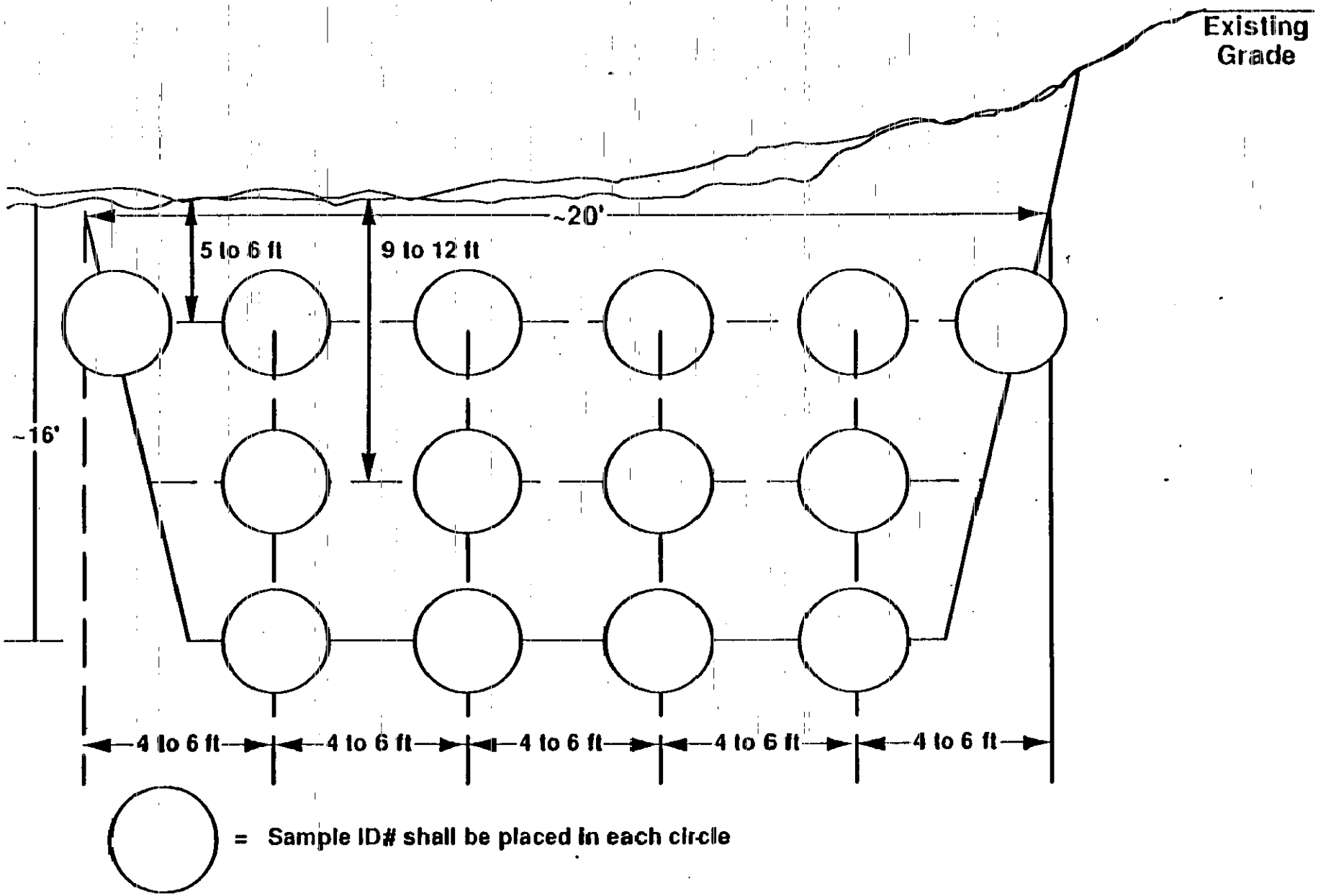


Figure 9. Trench No. 2 Vertical Sample Profile.

8.0 WORK COMPLETION RECORD

The Hanford Field Operations Supervisor, Project Control Analyst, or the Decommissioning Cognizant Engineer shall sign for the below listed items unless otherwise specified.

8.1 RWP and JSA are prepared and approved. _____

8.2 Radiological survey is completed per step 5.1. _____

8.3 Lift No. 1 sampling completed. _____
Field Team Leader

8.4 Soil pile posted "Lift No. 1" per step 6.3. _____

8.5 Lift No. 2 sampling completed. _____
Field Team Leader

8.6 Soil pile posted "Lift No. 2" per step 6.5. _____

8.7 Lift No. 3 sampling completed. _____
Field Team Leader

8.8 Soil pile posted "Lift No. 3" per step 6.5. _____

8.9 Lift No. 4 sampling completed. _____
Field Team Leader

8.10 Soil pile posted "Lift No. 4" per step 6.5. _____

8.11 Additional sampling completed through Lift No. _____. _____
Field Team Leader

8.12 Soil piles posted through Lift No. _____. _____

8.13 Trench lay out completed. _____
Decommissioning Eng.

8.14 Trench No. 1 sampling completed per step 7.3. _____
Field Team Leader

8.15 Trench No. 1 backfilled per step 7.5. _____

8.16 Trench No. 2 sampling completed per step 7.3. _____
Field Team Leader

8.17 Trench No. 2 backfilled per step 7.5. _____

ATTACHMENT 1

ANALYTICAL REQUIREMENTS FOR 183-H SOIL

ANALYSIS	METHOD	HOLDING TIME	GLASS/PLASTIC	SAMPLE SIZE	LABORATORY	DETECTION LIMIT
Gross Alpha Gross Beta Gamma Scan	9310	6 mos.	Glass	250 ml	K-25	20 pCi/gr
ICP/AA Metals	6010/7000 Series	6 mos.	Glass	250 ml	K-25	-----
Arsenic	7060/7061		Glass	250 ml	K-25	0.2 ppm
Mercury	7471	28 days	Glass	250 ml	K-25	0.2 ppm
Fluoride	Ion Chromo-tography		Glass	250 ml	K-25	1.0 ppm
Lead	7421		Glass	250 ml	K-25	0.1 ppm
Selenium	7740/7741		Glass	250 ml	K-25	0.5 ppm
Anions (Nitrate, Nitrite, & Sulfate)	EPA 300	28 days	Plastic	125 ml	K-25	1.0 ppm
Total Uranium	EPA 908	6 mos.	Glass	250 ml	K-25	0.1 pCi/gr
Tech-99	TP162B	6 mos.	Glass	250 ml	K-25	1.0 pCi/gr
Total Activity	NA	6 mos.	Glass/Plastic	<25 ml	222-S	20 pCi/gr

Sampling Note:

1. Minimum sample volumes should be as follows from sample point: two 250 ml glass, one 125 ml plastic, and two glass or plastic with at least 10 grams of soil for radioactive screening at 222-S.

2. K-25 is the lab currently under agreement to provide most of the requested analyses; other labs may be substituted as available.

ATTACHMENT 2

183-H SOLAR EVAPORATION BASIN BERM AND PERIMETER SOIL SAMPLING PLAN

ENVIRONMENTAL ENGINEERING

DECEMBER 5, 1990

183-H SOLAR EVAPORATION BASIN BERM AND PERIMETER SOIL SAMPLING PLAN

1. SCOPE/PURPOSE

The scope of this sampling effort is to collect soil samples for site characterization to meet the requirements of the "Perimeter Soil Samples" section of the 183-H Solar Evaporation Basin Closure Plan. In addition, other random and authoritative samples, as noted in the DWP text, shall be collected to support investigations and characterization of other soils around the solar basins.

2. SAMPLING TEAM

To ensure a safe and organized field sampling job, the designated field team leader and sampler(s) will be responsible to see that all field activities are conducted in accordance with the procedures outlined in WHC-CM-7-7, Environmental Investigations and Site Characterizations Manual (WHC 1989). The Field Team Leader is responsible for all documentation required to provide verification and traceability of all samples and associated activities. Documents to be included and maintained according to Westinghouse Hanford manual requirements are:

- Registered field logbook
- Chain-of-custody with appropriate signatures
- Sample analysis request forms
- Copy of sampling plan
- Job Safety Analysis (JSA)

3. SAMPLING EQUIPMENT

Decontaminated stainless steel equipment to be utilized for sample collection may include the following: spoons, scoops, bowls, augers, screens, and funnels.

A sufficient quantity of each item will be available for use at each individual sample site to prevent cross-contamination of samples by sampling equipment. Sample containers with full quality assurance certification and having lids with teflon liners will be used.

The following is a brief list of sampling materials to be utilized in this sampling effort:

- 60/120/250/500-ml plastic jars
- 120/250-ml amber glass jars
- Sample jar labels
- Protective gloves
- Ice chest with wet and "blue" ice
- Absorbent (vermiculite) for shipping
- Permanent marking pens
- 100/200 foot surveyor tape
- Evidence tape
- Known composition silica sand (as necessary)
- Other items as needed

4. DATA QUALITY OBJECTIVES

4.1. ANALYTICAL LEVELS

The U.S. Environmental Protection Agency (EPA) guidance (1987) provides five analytical levels for environmental characterization. These definitions describe categories of analysis and are used for reference in this document. The analytical levels are summarized as follows:

- Level I, Field Screening--generally using hand-held equipment.
- Level II, Field Analyses--using portable analytical instruments, usually in a mobile laboratory
- Level III, Laboratory Analysis--quantitative analysis using standard, documented laboratory procedures.
- Level IV, Laboratory Analysis--quantitative analysis using procedures which follow stringent quality assurance and quality control protocols and documentations.
- Level V, Laboratory Analysis--nonstandard methods or special analytical services.

All on-site personnel health and safety screening will be conducted at the Level I category, as per the JSA. Level II analyses maybe utilized to determine acceptable radionuclide values to meet shipping requirements. All laboratory analysis for samples shall be performed to Level III requirements. The procedures will follow the chemical analysis methods and protocols established by EPA manual SW-846, Test Methods for Evaluation of Solid Waste (EPA 1986b); except where noted in Table 1.

4.2 CONTAMINANTS OF CONCERN

The 183-H Solar Evaporation Basin Closure Plan enumerates the constituents listed in Table 1 as the contaminants of concern for analysis in the soils around the basin.

TABLE 1. ANALYTICAL METHODS FOR SOIL SAMPLING ANALYSIS

CONSTITUENT	ANALYTICAL METHOD
Arsenic	SW-846, 6010
Barium	SW-846, 6010
Beryllium	SW-846, 6010
Cadmium	SW-846, 6010
Chromium	SW-846, 6010
Copper	SW-846, 6010
Lead	SW-846, 6010
Manganese	SW-846, 6010
Mercury	SW-846, 7471
Nickel	SW-846, 6010
Selenium	SW-846, 6010
Silver	SW-846, 6010
Sodium	SW-846, 6010
Vanadium	SW-846, 6010
Zinc	SW-846, 6010
Fluoride	EPA 300
Nitrate	EPA 300
Sulfate	EPA 300
Uranium (total)	EPA 908
Technetium-99	TR 1629
Gross alpha	SW-846, 9310
Gross beta	SW-846, 9310
Gamma scan	SW-846, 9310

Note: Although Vanadium is listed as a waste, it has never been found in any waste designation sampling.

5. FIELD SAMPLING METHODOLOGY

5.1. SAMPLING LOCATIONS

Random and authoritative samples will be collected from the locations noted in the DWP text. Berm material samples shall be collected by locating the appropriate point of the basin wall from the locations included in DWP Figures 2, 4, 5, and 6. When the specified distance from the basin end is located (plus or minus 5 feet) the individual sample shall be taken between 6 and 18 inches from the basin wall. Trench samples shall be collected as shown in DWP Figures 8 and 9.

Additional, discretionary sampling locations may be determined onsite by the Field Team Leader. Factors influencing selection of discretionary sampling locations may include evidence of contamination and similar inconsistencies that may indicate contamination.

5.2. SAMPLE COLLECTION

All soil samples will be collected according to the protocols outlined in EII 5.2 "Soil and Sediment Sampling". Using separate sampling equipment at each sample location, the sampler will remove the top few inches of soil (1 to 6 in.) and fill the required number of wide-mouthed glass or plastic jars. Depending on conditions at each sample location, stainless steel screens, bowls and shovels may be required to obtain soil samples in rocky substrates. Upon securing the caps and cleaning the exterior of all containers, the sample will be returned to the Field Team Leader and the sampler will verify time of collection, sample location, field conditions and any other pertinent information. Containers will be labeled and place on ice. Prior to shipping , sample containers will be checked for sample integrity (i.e. broken bottles, caps, tight lids, etc.) secured with evidence tape and bagged to meet appropriate shipment requirements.

5.3. FIELD LOGBOOKS

A field logbook will be kept in accordance with the protocols outlined in EII 1.5, "Field Logbooks." When field work is completed, the original or a copy of the field logbook(s) shall be supplied to Decommissioning Engineering for inclusion in the 183-H Project File.

5.4. CHAIN-OF-CUSTODY

To establish the documentation necessary to ensure the traceability of samples from time of collection, EII 5.1, "Chain-of-Custody" will provide procedures for sample security. A copy of the WHC chain-of-custody form is shown in Figure 1.

Figure 1. Chain-of-Custody.

Westinghouse Hanford Company	CHAIN OF CUSTODY

Company Contact _____ Telephone _____

Sample Collected by _____ Date _____ Time _____

Sample Locations _____

Ice Chest No. _____ Field Logbook and Page No. _____

Remarks _____

Bill of Lading No. _____ Offsite Property No. _____

Method of Shipment _____

Shipped to _____

Possible Sample Hazards _____

Sample Identification

Chain of Possession

Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

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5.5. SAMPLE ANALYSES

An approved laboratory will be selected to conduct the analyses indicated in Table 1. Requests for appropriate analyses will be included on the WHC Sample Analysis Request form (Figure 2) as provided in EII 5.2 "Soil and Sediment Sampling". Laboratory specific forms may be required and will be supplied by the Office of Sample Management.

5.6. DECONTAMINATION

All equipment which is utilized for direct collection of samples will have been previously cleaned in accordance with EII 5.5, "Decontamination of Equipment for RCRA/CERCLA Sampling".

5.7. MODIFICATIONS TO SAMPLING PLAN

Under field conditions, the optimal aspects of the sample design may not be achievable (e.g., equipment malfunction or breakdown, weather conditions, soil conditions, physical barriers. Modifications to the planned activity may be necessary as decided by the Field Team Leader.

When field decisions are made by the Field Team Leader, necessary actions will be recorded in the field logbook along with circumstances requiring the action.

Circumstances or changing objectives may require major modifications of the basic sampling plan. In this situation, the Field Team Leader will submit the following information to the to the Cognizant Engineer. The Cognizant Engineer shall prepare and get approval for the appropriate change(s) to this decommissioning work plan (DWP). This change may be a DWP revision or a Procedure Change Authorization.

- sampling plan title
- section/subsection to be modified (chapter, title, page number), quoting section as given in sampling plan
- modifications or deviations, recording modified, deleted, or added statement
- technical summary of change
- approvals by original signers of the document or appropriate replacement

Figure 2. Sample Analysis Request.

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector _____ Date Sampled _____ Time _____ hours

Company Contact _____ Telephone (____) _____

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

PART II: LABORATORY SECTION

Received by _____ Title _____ Date _____

Analysis Required _____

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

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5.8. QUALITY ASSURANCE

Quality Assurance will be achieved through several areas which can include:

- Documentation (e.g., field logbook, chain-of-custody)
- Proper sample collection protocol
- Quality control samples (e.g., equipment blanks, trip blanks, field blanks and duplicate samples)

Quality control samples will be collected in accordance with SW-846 guidelines, where applicable. Quality control samples will consist of duplicates, trip blanks, field blanks, and equipment blanks. At a minimum, one sample in 20 will be divided in the field, appropriately labeled, and treated as a duplicate. In the event that the sampling rate is less than 20 samples per week, at least one duplicate sample will be collected per week. All samples will be submitted to the same analytical laboratory.

At least one trip blank will be collected during this sampling effort. A trip blank will be brought to the field in sealed containers and transported to the laboratory with the field samples. Since the samples will not be laboratory tested for volatiles, only a limited number of trip blanks will be collected and laboratory grade silica sand will be used as the blank material.

At least one field blank will be transported from the field to the laboratory for this sampling effort. Field blanks will be treated identical to trip blanks except that they will be opened in the field for about the same duration as one sample collecting period, closed, properly labeled, resealed, and transported to the laboratory with the field samples. Since the samples will not be laboratory tested for volatiles, only a limited number of trip blanks will be used.

At least one equipment blank will be collected during this sampling effort. Equipment blanks will be identical to trip blanks except that they will be opened in the field and poured over or through the sample collecting equipment before sampling.

5.9. SHIPPING

Before samples can be packaged and sent offsite, they will be held until released following completion of a radiological survey, according to applicable regulations for offsite shipments. All shipping requirements will comply with EII 5.11 (WHC 1989) with the shipping containers being inspected by a Westinghouse Hanford traffic representative to ensure compliance with the U.S. Department of Transportation requirements. Delays at Westinghouse Hanford shipping can be avoided or minimized by completing the following tasks:

- Inform Westinghouse Hanford shipping at least 1 day prior to samples being shipped

- Have sample containers at Westinghouse Hanford shipping around 1300 hours

Items to be checked for completion before sample containers are released to shipping personnel are:

- Copies of chain-of-custody and sample analysis forms attached to inside of ice chest lid
- Identify shipping container with appropriate markings and labels (e.g., "This End Up" stickers)
- Seal the ice chest lid with tape; sign and date.

6. PERSONNEL TRAINING

As the primary means of protecting the health and safety of field personnel all individuals who enter the controlled zones will have received the appropriate training to be qualified as a "Hazardous Waste Worker" as outlined in EII 1.1, "Hazardous Waste Site Entry Requirements".

7. JOB SAFETY REQUIREMENTS

The primary guidance for all site-safety related concerns and requirements will be designated in the Job Safety Analysis (JSA) as outlined in EII 2.1, "Preparation of Hazardous Waste Operations Permits". Job specific related activities will be delineated in the JSA and will provide guidance for appropriate personnel protection equipment (PPE), site monitoring, chemical/radiological hazards and potential safety hazards associated with the field/site environment.

All safety-related documents and sampling plans will be reviewed by field personnel prior to work commencement. A pre-job safety meeting and regular field-safety "tailgate" meetings will be held to review all safety considerations and identify any potential hazards not previously noted.

8. REFERENCES

EPA 1983, Standards Methods for Chemical Analysis of Water and Waste Water, EPA 600/4-79-026, U.S. Environmental Protection Agency, Washington, D.C.

EPA 1986a, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities, Title 40, Code of Federal Regulations, Part 264, U.S. Environmental Protection Agency, Washington, D.C.

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