

SUPPORTING DOCUMENT

1. Page 1 of 32

2. Title
Environmental Radiological Survey Summary
for April 1989

3. Number
~~WHC-SD-EV-20038~~ ^{CRH 8-4-89}
WHC-SD-SQA-EV-20038

4. Rev. No.
0

5. Key Words
Environmental Surveillance

6. Author
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Name (Type or Print)
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Signature
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Organization Code

7. Abstract

This report describes the results of the Environmental Radiological Surveys conducted during the month of April 1989. All scheduled surveys were completed.



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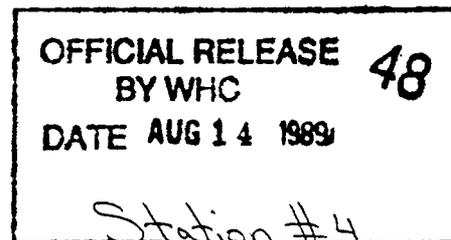
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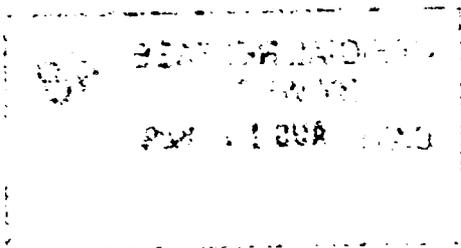
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ENVIRONMENTAL RADIOLOGICAL SURVEY
REPORT FOR APRIL 1989

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200/600 AREAS ENVIRONMENTAL PROTECTION

Executive Summary

Routine surveys to monitor radiological conditions are performed by Westinghouse Hanford Company on the surfaces of roads, firebreaks, radioactive waste sites, radioactively contaminated areas resulting from spills or releases, areas near buildings, tank farms, and other facilities in the 200 and 600 Areas. The survey frequencies for particular sites may be monthly, quarterly, semiannually, or annually, depending on the site history, radiological status, use, and general conditions. Additional surveys may be requested at irregular frequencies and are designated as special surveys or "specials". Radiological surveys are conducted on sites to detect surface contamination that may result from biological intrusion, erosion, or contamination that is windblown from other sources. Survey data are compared with operational control standards in WHC-CM-7-5, Environmental Compliance Manual, as well as past survey results to recognize possible trends, assess environmental impacts, and help determine where corrective actions are needed. Landlords of sites or facilities found out of compliance are issued a Surveillance and Compliance Inspection Report.

It should be noted that this program consists of operation's environmental surveys only and are not inclusive for the entire 200/600 Areas (e.g., inside active Tank Farms and Facilities are not included in these reports). Also, an environmental survey to determine surface radioactivity conditions does not equate to a release survey. Therefore, an environmental radiological survey that detects no surface contamination within a radiation control area does not mean that site is released from control.

The April 1989 survey results and the status of actions required in past reports are summarized below:

- There were 17 radiological surveys, summarized in Table 5.1, completed during April 1989.
- The terms "Audit Finding" and "Inspection Report" of former monthly reports have been replaced by the term "Surveillance and Compliance Inspection Report."
- One Surveillance and Compliance Inspection Report, summarized in Table 5.2, was issued as a result of April surveys.
- Three Surveillance and Compliance Inspection Reports, summarized in Table 5.3, were closed in April.
- Forty-seven Surveillance and Compliance Inspection Reports, summarized in Table 5.4, had not been resolved. Landlord responsibilities for the unresolved Surveillance and Compliance Inspection Reports are summarized in the Executive Summary Table.

EXECUTIVE SUMMARY TABLE

LANDLORD RESPONSIBILITY FOR OPEN
SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS

<u>LANDLORD</u>	<u>SURVEILLANCE & COMPLIANCE INSPECTION REPORTS</u>
Decontamination and Decommissioning	41
B Plant	2
PUREX	1
Tank Farm Process Operations	3

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1.0 INTRODUCTION

1.1 OBJECTIVES

Evaluations of all environmental radiation surveys conducted on 200/600 Areas road surfaces, outdoor radiation areas, low-level waste disposal sites and in the operations area environment under Westinghouse Hanford Company jurisdiction are the responsibility of Environmental Protection. These surveys and their analyses accomplish the following objectives:

- Determine compliance with Department of Energy requirements and Westinghouse policy and standards regarding operational control, environmental and radiological protection.
- Identify trends in radiation levels and radioactive contaminants at waste disposal sites, other radiation areas, and in the operations area environment.
- Assess the surface integrity of solid and liquid waste disposal sites.
- Detect contamination migration from radiologically controlled areas.
- Monitor for unplanned releases of radioactivity to the operations area environment.
- Determine the level of worker protection.
- Assure the general public of safety and environmental protection standards at the Hanford Site.

Sites surveyed and reported in this document may include trenches, cribs, ponds, ditches, French drains, burial grounds, facility perimeters, tank farm perimeters, roadways, and areas with radioactive contamination due to spills or unplanned releases.

1.2 SURVEY RESULTS FORMAT

This report provides a summary of the 17 environmental radiological surveys conducted during April 1989. It includes brief descriptions of survey results (Table 5.1), sites where Surveillance and Compliance Inspection Reports (SCIR) were issued (Table 5.2), SCIRs which were closed (Table 5.3), and the status of previously issued SCIRs (Table 5.4).

2.0 ENVIRONMENTAL PROTECTION STANDARDS

In this document, radiation survey data are used to determine compliance with the following WHC-CM-7-5, Environmental Compliance Manual, requirements:

Section L4.0 (a): Facility operations management shall provide a barrier over the contamination source which inhibits radionuclide transport to the surface. The barrier design shall be based on proven techniques which are appropriate for the type of disposal, and the adequacy of the barrier shall be verified by demonstrating through periodic monitoring that surface contamination levels do not exceed the limits established in Part K4.0.

Section L4.0 (c): Surface radiation levels shall be less than 1 mrem/hr (10 uSv/hr). The surface shall be uncontaminated; i.e., less than the limits in Part K (Part K4.0).

In this document, most radiation field measurements are reported in disintegrations per minute (dpm). In order to compare standards [as established in WHC-CM-7-5, Section L4.0 (c)] and field instrument values, a conversion factor is necessary. This conversion factor has been established where 20,000 dpm are approximately equivalent to one millirem per hour or 10 micro seiverts per hour for beta emitting radionuclides (Hankins, 1982). It must be understood that converting field instrument values, which included both beta and gamma energies, is approximate and does not allow for absolute precision.

These requirements apply to all inactive radioactive waste sites which include tank farm perimeters, cribs, burial grounds, trenches, ditches, ponds, French drains, and other areas of radioactive contamination due to spills or releases. Tank farms and radiation areas where operations are ongoing are not included.

3.0 REPORTS AND FINDINGS

Whenever it is determined that conditions at a site are not in compliance with standards established in WHC-CM-7-5, a SCIR is issued by Environmental Protection to the appropriate area landlord to facilitate resolution and to bring the site into compliance. If a compliance plan is not provided to Environmental Protection within one month, a second SCIR is issued and if a compliance plan is not provided to and accepted by Environmental Protection within two months of first issue, the SCIR is considered delinquent and will be placed on the Quality Safety Trending system (QST).

Once smearable contamination is contained on or removed from a site for which a SCIR has been issued, the Report may be closed after a follow-up radiation survey has indicated that no further environmental impact is evident. For example, nonsmearable contamination may remain and the site will remain as a radiation area but not be out of compliance, therefore, the SCIR is closed.

Resolution of a SCIR is considered initiated when a formal corrective action plan is provided to and accepted by Environmental Protection. However, for tracking purposes it will remain on file and appear in subsequent Environmental Radiological Survey Reports until satisfactory completion of the plan is demonstrated to Environmental Protection. A visual inspection by Environmental Protection and/or a post-corrective action radiation survey by Health Physics is required before closing a SCIR.

4.0 SURVEY METHODS AND PRACTICES

4.1 ROAD SURVEYS

Road surveys are performed with a beta-gamma detector mounted approximately 20 inches above the ground on the underside of a vehicle with a readout in the cab. The vehicle is driven at less than seven miles per hour. When activity is detected, the vehicle is stopped and a thorough survey is made with an Eberline Model BNW-1 survey meter equipped with a P-11 mica window probe to identify the extent of contamination. Waste Management Health Physics and the appropriate operations management are notified when road contamination is found so that corrective action can be initiated. The road monitor is designed to detect contamination over 5,000 disintegrations per minute and within the effective range of the detector.

4.2 WASTE SITES AND OTHER RADIATION AREA SURVEYS

Surveys at waste sites and other radiation areas may be conducted with vehicles equipped with radiation detection instruments or with hand-held field instruments. Field instrument survey results are reported in disintegrations per minute as detected by a P-11 mica window probe attached to an Eberline Model BNW-1 count rate meter. Alpha survey results are reported in disintegrations per minute and are measured with a portable alpha meter (PAM) or a portable alpha counter (PAC-6). Surveys include the perimeter and portions of the ground surface of radiation areas. Wherever possible, smear surveys are made on the surface of exposed equipment within a radiation area. Vegetation, animal burrows, and animal feces are also monitored to detect biological transport. Detailed survey practices and procedures are described in WHC-CM-4-10, Radiation Protection Manual, WHC-CM-4-13, Operational Health Physics Procedures, and WHC-CM-7-4, Operational Environmental Monitoring.

5.0 SURVEY RESULTS

Surface radiological survey schedules were revised in March to more efficiently distribute work loads. Radiological surveys scheduled in April 1989 included 17 sites. All scheduled surveys were completed and the results are summarized in the following sections.

5.1 APRIL RADIOLOGICAL SURVEY RESULTS

There were 17 sites surveyed in April. The completed surveys are summarized in Table 5.1 which is divided into site name, survey frequency, posting status, survey results, corrective action and, when appropriate, a site diagram (i.e., figure). There was one SCIR issued as a result of the April surveys (Table 5.2).

TABLE 5.1

APRIL RADIOLOGICAL SURVEY RESULTS

Site Name: 216-A-3 Crib / 200 East

Survey Frequency: Annual **Posting:** Underground Radioactive Material

Survey Results: ■ No contamination detected.
 ■ No change in activity since the last survey.

Corrective Action: No action required.

Site Name: 216-A-6 Crib / 200 East

Survey Frequency: Annual **Posting:** Surface Contamination

Survey Results: ■ No contamination detected.
 ■ No change in activity since the last survey.

Corrective Action: A release survey has been recommended to determine if the posting for this site can be changed to "Underground Radioactive Material."

Site Name: 216-A-7 Crib / 200 East

Survey Frequency: Annual **Posting:** Surface Contamination

Survey Results: ■ No contamination detected.
 ■ No change in activity since the last survey.

Corrective Action: A release survey has been recommended to determine if the posting for this site can be changed to "Underground Radioactive Material."

Site Name: 216-A-9 Crib / 200 East

Survey Frequency: Annual **Posting:** Surface Contamination

Survey Results: ■ 2,500 to 3,500 dpm (beta/gamma) on and around risers.
 ■ This is an increase in activity since the last survey.

Corrective Action: The landlord has been notified, however, no SCIR will be issued at the present time. Additional monitoring has been requested for this site.

TABLE 5.1 CONTINUED

Site Name: 216-A-24 Crib / 600 Area

Survey Frequency: Annual **Posting:** Surface Contamination

Survey Results: ■ No contamination detected.
 ■ No change in activity since the last survey.

Corrective Action: A release survey has been recommended to determine if the posting for this site can be changed to "Underground Radioactive Material."

Site Name: 216-A-27 Crib / 200 East

Survey Frequency: Annual **Posting:** Surface Contamination

Survey Results: ■ No contamination detected.
 ■ No change in activity since the last survey.

Corrective Action: A release survey has been recommended to determine if the posting for this site can be changed to "Underground Radioactive Material."

Site Name: 216-A-41 Crib / 200 East

Survey Frequency: Annual **Posting:** Surface Contamination

Survey Results: ■ No contamination detected.
 ■ No change in activity since the last survey.

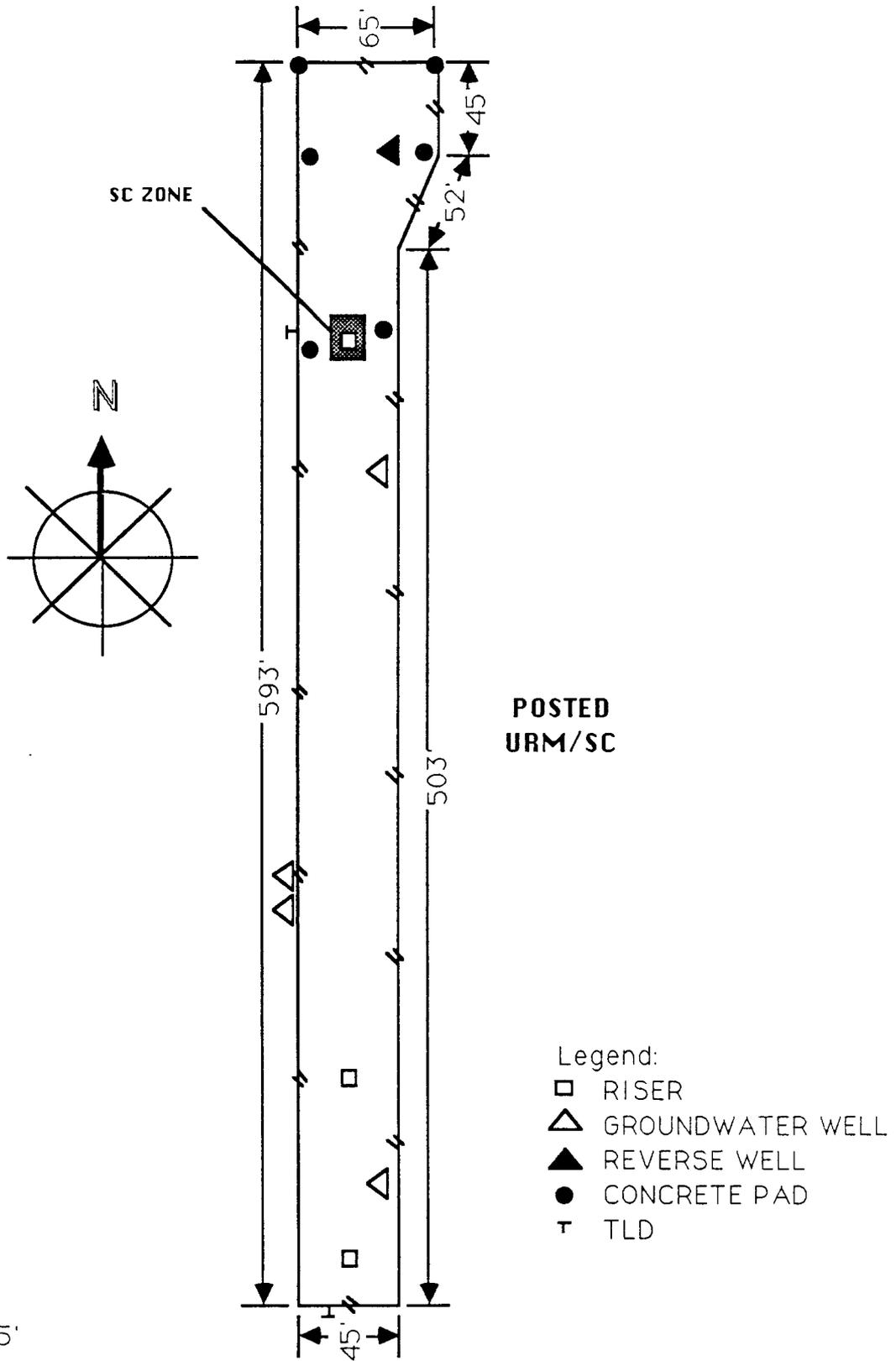
Corrective Action: A release survey has been recommended to determine if the posting for this site can be changed to "Underground Radioactive Material."

Site Name: 216-A-36A Crib / 200 East (Figure 1)

Survey Frequency: Annual **Posting:** Surface Contamination

Survey Results: ■ Riser at north end had 30,000 dpm (beta/gamma) smearable and 8 mrad direct contamination.
 ■ This is an increase in activity since the last survey.

Corrective Action: Tank Farm Operations was issued SCIR # 8907EP200-031 specifying the need for clean-up and decontamination. Additional monitoring has been requested.



Scale: 1" = 75'

FIGURE 1. 216-A 36 A/B

TABLE 5.1 CONTINUED

Site Name: Outside perimeter roads / 200 East

Survey Frequency: Quarterly Posting: None

Survey Results: ■ No contamination detected.
 ■ No change in activity since the last survey.

Corrective Action: No action required.

Site Name: 216-T-1 Ditch / 200 West

Survey Frequency: Semiannual Posting: Surface Contamination

Survey Results: ■ No contamination detected.
 ■ No change in activity since the last survey.

Corrective Action: A release survey has been recommended to determine if the posting for this site should be changed to "Underground Radioactive Material."

Site Name: Outside perimeter roads / 200 West

Survey Frequency: Quarterly Posting: None

Survey Results: ■ No contamination detected.
 ■ No change in activity since the last survey.

Corrective Action: No action required.

Site Name: Transfer Line Vent Station Perimeter / 600 Area

Survey Frequency: Semiannual Posting: None

Survey Results: ■ No contamination detected.
 ■ No change in activity since the last survey.

Corrective Action: No action required.

Site Name: 241-S, SX, & SY Tank Farm Perimeters / 200 West

Survey Frequency: Annual Posting: None

Survey Results: ■ No contamination detected.
 ■ This is a decrease in activity since the last survey.

Corrective Action: These sites will continue to be monitored for changes in radioactivity migrating out of the tank farms.

TABLE 5.1 CONTINUED

Site Name: 216-A-40 Retention Basin / 200 East

Survey Frequency: Annual Posting: Surface Contamination

Survey Results: ■ 35,000 dpm (beta/gamma) at animal burrow on north end.
■ 50,000 dpm (beta/gamma) on the east berm.
■ 10,000 dpm (beta/gamma) at edge of trench.
■ No change in activity since the last survey.

Corrective Action: SCIR # EP-88-9 was previously issued to Tank Farm Operations. Additional monitoring has been requested for this site.

Site Name: 216-A-38 Crib / 200 East

Survey Frequency: Annual Posting: Underground Radioactive Material

Survey Results: ■ No contamination detected.
■ No change in activity since the last survey.

Corrective Action: No action required.

Site Name: 216-A-1 through 7 Cribs / 200 East

Survey Frequency: Annual Posting: Surface Contamination

Survey Results: ■ No contamination detected.
■ This is a decrease in activity since the last survey.

Corrective Action: Monitoring of these cribs will continue to detect any changes in radioactivity until stabilization is completed.

Site Name: BC Crib Ground Plots

Survey Frequency: Semiannual Posting: Controlled Area

Survey Results: ■ No migration of contamination detected.
■ No change in activity since the last survey.

Corrective Action: Monitoring will continue at these sites to detect any changes in or migration of radioactivity.

5.2 SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS ISSUED IN APRIL

One SCIR, # 8907200-031, was issued as a result of April surveys. This SCIR is summarized in Table 5.2.

**TABLE 5.2
SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS ISSUED IN APRIL**

<u>SITE</u>	<u>REPORT #</u>	<u>ISSUED TO</u>	<u>REQUIRED ACTION</u>
216-A-36A	8907EP200-031	Tank Farm Operations	Decontaminate riser at north end of crib.

5.3 SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS CLOSED IN APRIL

Decontamination and Decommissioning Operations has reported completion of clean-up and decontamination at 216-T-3 Reverse Well, stabilization of 216-A18 Crib, 216-A-34 Crib, and 202-S Rail Road Cut, and termite eradication, control, and stabilization at 218-W-2A Burial Ground. Environmental Protection has received verification that these actions were completed, and therefore closed these SCIRs. Quality Assurance has been notified of those items needing to be closed from the QST.

TABLE 5.3 SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS CLOSED IN APRIL

<u>SITE</u>	<u>REPORT #</u>	<u>ISSUED TO</u>	<u>COMPLETED ACTION</u>
216-T-3	EP-87-48	Decontamination & Decommissioning	Area decontaminated.
202-S RR Cut, 216A-18, & 216-A-34 Cribs	ESC-85-02-02	Decontamination & Decommissioning	Areas stabilized.
218-W-2A (part)	8811EP200-024	Decontamination & Decommissioning	Area stabilized & treated with pesticides.

5.4 STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS

Compliance plans for sites found to be out of compliance with the Environmental Compliance Manual, WHC-CM-7-5, and therefore issued SCIRs, either have been completed and submitted to Environmental Protection or are being developed by the responsible organization. Forty-seven of these SCIRs remained open. These reports are summarized in Table 5.4 to include the referenced site, site condition at the time of the surveillance or inspection, report number, date issued, action required, actionee, and current status.

TABLE 5.4

STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS

 Site/Condition: 216-A-24 Crib: 2,000 to 800,000 dpm on vegetation and surface.

Report #: ESC-84-02-02 Date Issued: 8/84

Action Required: Remove vegetation and clean the surface.

Actionee: Manager, Decontamination and Decommissioning Operations.

Current Status: Vegetation has been removed, the site has been cleaned, covered with clean dirt, and reseeded. All tasks and verification are scheduled to be completed by 10/89.

 Site/Condition: UN-216-E-17: 10,000 to > 1,000,000 dpm on the surface.

Report #: ESC-84-02-03 Date Issued: 8/84

Action Required: Clean the surface.

Actionee: Manager, Decontamination and Decommissioning Operations.

Current Status: Work is scheduled to begin and be completed in FY 1990.

 Site/Condition: UN-216-E-31: 2,000 to > 1,000,000 dpm on tumbleweeds and surface.

Report #: ESC-84-02-04 Date Issued: 8/84

Action Required: Remove the tumbleweeds and clean the surface.

Actionee: Manager, Decontamination and Decommissioning Operations.

Current Status: This site is scheduled for cleanup in FY 1991.

 Site/Condition: A, AX, AY, AZ, B, BX, BY Tank Farm Perimeters: Spot contamination to > 1,000,000 dpm with dose rates 90 mrad/hr.

Report #: ESC-85-004 Date Issued: 6/85

Action Required: Clean surfaces.

Actionee: Manager, Decontamination and Decommissioning Operations.

Current Status: Past interim cleanup has been ineffective due to contamination sources from inside the Tank Farms. Resolution and cleanup is scheduled for FY 1994.

TABLE 5.4 CONTINUED

Site/Condition: UN-216-E-23: 10,000 to 700,000 dpm on surface and tumbleweeds.

Report #: ESC-85-019 Date Issued: 11/85

Action Required: Remove tumbleweeds and clean surface.

Actionee: Manager, B Plant Operations.

Current Status: Tumbleweeds have been removed. The site will be cleaned up in FY 1990.

Site/Condition: 216-B-57 Crib: 15,000 to 600,000 dpm on the surface.

Report #: ESC-85-016 Date Issued: 2/86

Action Required: Clean surface and stabilize site.

Actionee: Manager, Decontamination and Decommissioning Operations.

Current Status: The estimated completion date is 9/30/90.

Site/Condition: West of 216-B-64 Trench: 2,000 to 500,000 dpm on surface and ant hills.

Report #: ECU-86-016 Date Issued: 4/86

Action Required: Poison ants and clean surface.

Actionee: Manager, Decontamination and Decommissioning Operations.

Current Status: The ants have been poisoned three times since 1985, most recently in 1989. Cleanup is scheduled for FY 1992.

Site/Condition: 207-S Retention Basin: 4,000 to 100,000 dpm on surface and tumbleweed fragments.

Report #: ECU-86-022 Date Issued: 8/86

Action Required: Clean the surface.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: Estimated completion date is 9/30/90.

TABLE 5.4 CONTINUED

Site/Condition: 216-Z-5 Crib: 100,000 dpm on tumbleweed fragments and surface. Site has high cave in potential.

Report #: ECU-86-026 Date Issued: 8/86

Action Required: Cleanup and stabilize site.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: This site is to be addressed by the crib isolation & stabilization program and is proposed for inclusion in the FY 1989 work scope.

Site/Condition: 216-Z-7 Crib: 30,000 to > 1,000,000 dpm with dose rate of 20 mrad/hr on tumbleweed fragments and surface. Site has high cave in potential.

Report #: ECU-86-028 Date Issued: 8/86

Action Required: Cleanup and stabilize site.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: An engineering study is needed prior to commencing cleanup activities. Estimated completion date is 9/30/93.

Site/Condition: 218-E-12B Stabilized Burial Ground: 10,000 to 300,000 dpm on surface as a result of termite intrusion.

Report #: ECU-86-036 Date Issued: 10/86

Action Required: Clean surface.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: 300,000 dpm spot has been cleaned up and the termites exterminated. The estimated completion date is 9/30/93.

Site/Condition: UN-216-W-7: 3,000 to > 1,000,000 dpm on surface with dose rate to 10 mrad/hr.

Report #: ECU-86-045 Date Issued: 10/86

Action Required: Clean the surface.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/89.

TABLE 5.4 CONTINUED

Site/Condition: UN-216-W-24: 50,000 dpm on the surface.

Report #: ECU-86-046 Date Issued: 10/86

Action Required: Clean the surface.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/91.

Site/Condition: UN-216-W-29: 5,000 to 20,000 dpm on the surface.

Report #: ECU-86-047 Date Issued: 10/86

Action Required: Clean the surface.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/90.

Site/Condition: UN-216-W-30: 10,000 TO 1000,000 dpm on the surface.

Report #: ECU-86-048 Date Issued: 10/86

Action Required: Clean the surface.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/92.

Site/Condition: UN-216-W-31: 2,000 to 500,000 dpm on the surface.

Report #: ECU-86-049 Date Issued: 10/86

Action Required: Clean the surface.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/92.

TABLE 5.4 CONTINUED

Site/Condition: 216-T-26 through 28 Trenches: 2,500 to 500,000 dpm with dose rates of 2.5 mrad/hr on rabbit feces.

Report #: ECU-86-052 Date Issued: 11/86

Action Required: Remove rabbit feces and clean the surface.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: Cleanup is scheduled for completion in FY 1990.

Site/Condition: 216-T-34 Crib: 10,000 to 50,000 dpm on the surface, 300,000 dpm with dose rates to 5 mrad/hr on live tumbleweeds.

Report #: ECU-86-053 Date Issued: 11/86

Action Required: Remove the tumbleweeds and clean the surface.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: Site cleanup will be completed by 9/30/89.

Site/Condition: 618-2&3 Burial Grounds: 2,000 to 70,000 dpm on the surface

Report #: ECU-86-057 Date Issued: 12/86

Action Required: Clean the surface and fill depressions.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: Clean dirt has been placed over the surface. Completion is scheduled by 9/30/89.

Site/Condition: 216-C-8 French Drain: 3,000 to 50,000 dpm on the surface.

Report #: ECU-87-10 Date Issued: 4/87

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/89.

TABLE 5.4 CONTINUED

Site/Condition: 241-S, SX, & SY Tank Farm Perimeters: 2,000 to > 1,000,000 dpm on the surface with dose rates to 20 mrad/hr.

Report #: ECU-87-20 **Date Issued:** 5/87

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/93.

Site/Condition: 216-A-6 Crib: 2,000 to 20,000 dpm on tumbleweeds and on the surface.

Report #: ECU-87-21 **Date Issued:** 5/87

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/90.

Site/Condition: 216-A-7 Crib: 12,000 to 15,000 dpm on the surface plus subsurface shine.

Report #: ECU-87-22 **Date Issued:** 5/87

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/89.

Site/Condition: 204-S Stabilized Area: 150,000 dpm on the surface with dose rates to 25 mrad/hr.

Report #: EP-87-28 **Date Issued:** 8/87

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The decontamination plan is in progress. The estimated completion date is 9/30/89.

TABLE 5.4 CONTINUED

Site/Condition: 216-Z-10 Crib: 10,000 to 250,000 dpm on the surface, rabbit feces, and tumbleweed fragments.

Report #: EP-87-33 **Date Issued:** 8/87

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The decontamination plan is in progress. The estimated completion date is 9/30/89.

Site/Condition: 218-W-9 Vault: 100,000 dpm on the surface.

Report #: EP-87-34 **Date Issued:** 8/87

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The decontamination plan is in progress. The estimated completion date is 9/30/89.

Site/Condition: 216-S-6 Crib: 2,000 to 200,000 dpm on the surface and on live and dead rabbitbrush.

Report #: EP-87-35 **Date Issued:** 9/87

Action Required: Remove the vegetation and clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The decontamination plan is in progress. The estimated completion date is 9/30/89.

Site/Condition: UN-216-W-26: 5,000 dpm on weeds and on the surface.

Report #: EP-87-38 **Date Issued:** 10/87

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/91.

TABLE 5.4 CONTINUED

Site/Condition: UN-216-E-32: 40,000 dpm on the surface.

Report #: EP-87-44 Date Issued: 10/87

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The decontamination plan is in progress. The estimated completion date is 9/30/89.

Site/Condition: 216-B-7A & B Cribs: 50,000 dpm on the surface.

Report #: EP-87-45 Date Issued: 11/87

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/92.

Site/Condition: 216-B-9 Crib & Tile Field: 30,000 dpm on the surface.

Report #: EP-87-46 Date Issued: 11/87

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/92.

Site/Condition: 216-B-43 through 50 Cribs: 3,000 to 60,000 dpm on surfaces.

Report #: EP-87-47 Date Issued: 11/97

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/92.

TABLE 5.4 CONTINUED

Site/Condition: UN-216-E-37: Activity greater than 1,000,000 dpm on the surface with dose rates to 25 mrad/hr.

Report #: EP-87-50 Date Issued: 12/87

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The decontamination plan is in progress. The estimated completion date is 9/30/89.

Site/Condition: Tank Unloading Station at T Plant: 100,000 dpm beta/gamma and 7,000 dpm alpha smearable contamination on duct work. Surface contamination also present.

Report #: EP-87-51 Date Issued: 12/87

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The decontamination plan is in progress. The estimated completion date is 9/30/89.

Site/Condition: 276-U Basin: 4,000 to 200,000 dpm on the surface.

Report #: EP-88-7 Date Issued: 5/88

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The estimated completion date is 9/30/90.

Site/Condition: 216-A-40 Basin: 5,000 to 50,000 dpm on tumbleweed fragments and on the surface.

Report #: EP-88-9 Date Issued: 5/88

Action Required: Clean the area.

Actionee: Manager, Tank Farms Process Operations.

Current Status: Clean up is in progress. The estimated completion date is 12/30/89.

TABLE 5.4 CONTINUED

Site/Condition: WR Vault: 25,000 dpm on the surface.

Report #: EP-88-10 Date Issued: 5/88

Action Required: Clean the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The decontamination plan is in progress. The estimated completion date is 9/30/89.

 Site/Condition: 216-U-1 & 2 Cribs: 2,500 to 8,000 dpm on surface outside of the perimeter.

Report #: EP-88-15 Date Issued: 9/88

Action Required: Clean up the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: The engineering study will be completed by 9/30/89.

 Site/Condition: 618-5 Burial Ground: 2,000 to 10,000 dpm on the surface.

Report #: EP-88-17 Date Issued: 9/88

Action Required: Clean up the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: Clean dirt has been placed over the contamination. The estimated completion date is 9/30/89.

 Site/Condition: 216-U-10 Pond: Contamination to 10,000 dpm on the surface.

Report #: 8810EP200-008 Date Issued: 10/88

Action Required: Clean up the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: Engineering study will be completed by 9/30/89.

TABLE 5.4 CONTINUED

Site /Condition: 216-U-11 Overflow Area: Contamination to 10,000 dpm on the surface and subsurface source.

Report #: 8810EP200-009 Date Issued: 10/88

Action Required: Clean up the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: This site was to have been completed 1/89 but Environmental Protection has not been asked to close the Report.

 Site/Condition: UN-216-W-33: Contamination from 5,000 to 25,000 dpm on vegetation and the surface.

Report #: 8810EP200-012 Date Issued: 10/88

Action Required: Clean up the area.

Actionee: Manager, Tank Farm Operations.

Current Status: Clean up is in progress. The estimated completion date is 9/30/89.

 Site/Condition: 216-B-11A & B Reverse Wells: Spot contamination from 10,000 to 25,000 dpm around site perimeter.

Report #: 8810EP200-025 Date Issued: 11/88

Action Required: Clean up the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: Necessary corrective actions are being investigated.

 Site/Condition: 216-B-64 Retention Basin: Spot contamination from 3,000 to 15,000 dpm on the surface.

Report #: 8810EP200-026 Date Issued: 11/88

Action Required: Clean up the area.

Actionee: Manager, B Plant Operations.

Current Status: This area has been treated with herbicides to prevent growth of contaminated vegetation.

TABLE 5.4 CONTINUED

Site/Condition: 216-T-18 Crib: Spot contamination from 2,000 to 10,000 dpm on the surface resulting from termite emergence.

Report #: 8810EP200-027 **Date Issued:** 11/88

Action Required: Clean up the area.

Actionee: Manager, Decontamination and Decommissioning.

Current Status: Feasibility investigations to be conducted in FY 1989.

Site/Condition: UN-216-E-16: Surface contamination from 10,000 to 1,000,000 dpm with dose rates to 15 mrad/hr.

Report #: 8901EP200-001 **Date Issued:** 1/89

Action Required: Clean up the area.

Actionee: Manager, PUREX Operations.

Current Status: The area is in the process of being cleaned up. The expected completion date of 6/09/89 was missed due to training requirements for additional personnel .

Site/Condition: 216-A-29, 216-B-3-3, 216-B Ponds: There were no barrier chains between "Surface Contamination" signs as required in WHC-CM-4-10.

Report #: 8906EP200-025 **Date Issued:** 6/89

Actionee: Manager, Tank Farm Operations

Current Status: Chains have been placed along the north side of 216-B-3-3 Ditch, and around 216-B-3 Pond. Additional chain has been ordered to complete the task.

6.0 SUMMARY

Seventeen sites were surveyed in April 1989 (Table 5.1).

One SCIR was issued (Table 5.2).

Three SCIRs were closed (Table 5.3).

Forty-seven SCIRs remained open (Table 5.4). All open reports have been addressed and clean-up plans with completion dates are actively being developed or have already been provided to Environmental Protection.

7.0 REFERENCES

Hankins, D. E., "Evaluation of Beta Energy (E max) and Spectral Type Using Survey Instruments"; UCRL-88275, November 1982

WHD-CM-1-3, Management Requirements and Procedures

WHD-CM-4-10, Radiation Protection

WHD-CM-4-13, Operational Health Physics Procedures

WHD-CM-7-4, Operational Environmental Monitoring

WHD-CM-7-5, Environmental Compliance Manual

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Project Title/Work Order: **Environmental Radiological Survey Summary for April 1989
 WHC-SD-SQA-EV-20037** EDT No. ~~005000~~ **119652**
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