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ENVIRONMENTAL RADIOLOGICAL SURVEY  
REPORT FOR JULY 1989

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

- There were 24 radiological surveys, summarized in Table 5.1, completed during July 1989.
- The terms "Audit Finding" and "Inspection Report" of former monthly reports have been replaced by the term "Surveillance and Compliance Inspection Report."
- No surveillance and Compliance Inspection Reports were issued as a result of July surveys.
- One Surveillance and Compliance Inspection Report was closed in July
- Forty-nine 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 &amp; COMPLIANCE INSPECTION REPORTS</u>
Decontamination and Decommissioning	42
B Plant	2
PUREX	1
Tank Farm Process Operations	4

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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 24 environmental radiological surveys conducted during July 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 sieverts 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 July 1989 included 24 sites. All scheduled surveys were completed and the results are summarized in the following sections.

### 5.1 JULY RADIOLOGICAL SURVEY RESULTS

There were 24 sites surveyed in July. 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).

**TABLE 5.1 RADIOLOGICAL SURVEY RESULTS**

<b>Site Name:</b>	216-Z-17 Crib	
<b>Survey Frequency:</b>	Annual	<b>Posting:</b> Underground Radioactive Material
<b>Survey Results:</b>	<ul style="list-style-type: none"> <li>■ No contamination detected</li> <li>■ No change since survey of 7/13/88</li> </ul>	
<b>Corrective Action:</b>	No action required	
<hr/>		
<b>Site Name:</b>	216-Z-7 Crib	
<b>Survey Frequency:</b>	Annual	<b>Posting:</b> Surface Contamination
<b>Survey Results:</b>	<ul style="list-style-type: none"> <li>■ Cave-in potential, only perimeters surveyed</li> <li>■ No contamination detected</li> <li>■ No change since survey of 7/88</li> </ul>	
<b>Corrective Action:</b>	Engineering studies are in progress to determine the safest method to stabilize cave-in potential sites.	
<hr/>		
<b>Site Name:</b>	216-Z-4 Crib	
<b>Survey Frequency:</b>	Annual	<b>Posting:</b> Underground Radioactive Material
<b>Survey Results:</b>	<ul style="list-style-type: none"> <li>■ No contamination detected</li> <li>■ No change since 7/88</li> </ul>	
<b>Corrective Action:</b>	No action required	
<hr/>		
<b>Site Name:</b>	218-W-9 Vault	
<b>Survey Frequency:</b>	Annual	<b>Posting:</b> Surface Contamination
<b>Survey Results:</b>	<ul style="list-style-type: none"> <li>■ Spotty contamination from 5K to 10K d/m noted</li> <li>■ Similar contamination noted in survey of 7/88</li> </ul>	
<b>Corrective Action:</b>	RPT's should continue to monitor for change. Ref. open Surveillance and Compliance Inspection Report # EP-87-34	
<hr/>		
<b>Site Name:</b>	218-W-7 Vault	
<b>Survey Frequency:</b>	Annual	<b>Posting:</b> Surface Contamination
<b>Survey Results:</b>	<ul style="list-style-type: none"> <li>■ 4mr/hr fixed contamination on waste chute</li> <li>■ Decrease in activity since 7/88</li> </ul>	
<b>Corrective Action:</b>	No action required	

TABLE 5.1 CONTINUED

Site Name:	Road Survey-inside East Area	
Survey Frequency:	Bi-Monthly	Posting: Not Applicable
Survey Results:	<ul style="list-style-type: none"> <li>■ 4500d/m fixed contamination at North end of Baltimore 20K d/m fixed contamination on 222B turn-around, all other road surfaces less than detectable.</li> <li>■ No change since last survey</li> </ul>	
Corrective Action:	No action required	
<hr/>		
Site Name:	Road Survey-inside West Area	
Survey Frequency:	Bi-Monthly	Posting: Not applicable
Survey Results:	<ul style="list-style-type: none"> <li>■ 20K d/m fixed contamination at 23rd &amp; Camden, all other road surface less than detectable.</li> <li>■ No change since last survey</li> </ul>	
Corrective Action:	No action required	
<hr/>		
Site Name:	Road Survey - outside East Area	
Survey Frequency:	Quarterly	Posting: Not Applicable
Survey Results:	<ul style="list-style-type: none"> <li>■ No contamination detected on perimeter roads</li> <li>■ No change since last survey</li> </ul>	
Corrective Action:	No action required	
<hr/>		
Site Name:	Road Survey - outside West Area	
Survey Frequency:	Quarterly	Posting: Not Applicable
Survey Results:	<ul style="list-style-type: none"> <li>■ No contamination detected on perimeter roads</li> <li>■ No change since last survey</li> </ul>	
Corrective Action:	No action required	

**TABLE 5.1 CONTINUED**

<b>Site Name:</b>	207-S Retention Basin	
<b>Survey Frequency:</b>	Annual	<b>Posting:</b> Surface Contamination
<b>Survey Results:</b>	<ul style="list-style-type: none"> <li>■ Contamination spots vary from 2500 d/m to 35,000 d/m</li> <li style="padding-left: 150px;">No significant changes since last survey</li> </ul>	
<b>Corrective Action:</b>	RPT's should continue to monitor for change. This area is also known as UN-216-W-2.(ref. ESC-84-017)	
<hr/>		
<b>Site Name:</b>	207-B Retention Basin	
<b>Survey Frequency:</b>	Annual	<b>Posting:</b> Surface Contamination
<b>Survey Results:</b>	<ul style="list-style-type: none"> <li>■ No contamination detected on perimeters</li> <li>■ No change since survey of 7/88</li> </ul>	
<b>Corrective Action:</b>	No action required	
<hr/>		
<b>Site Name:</b>	218-W-8 Vault	
<b>Survey Frequency:</b>	Annual	<b>Posting:</b> Surface Contamination
<b>Survey Results:</b>	<ul style="list-style-type: none"> <li>■ Perimeter survey only due to Cave-in Potential; No contamination detected</li> <li>■ No change since survey of 7/88</li> </ul>	
<b>Corrective Action:</b>	Engineering studies are being done to determine how to safely stabilize cave-in potential sites.	
<hr/>		
<b>Site Name:</b>	207 SL Retention Basin	
<b>Survey Frequency:</b>	Annual	<b>Posting:</b> Surface Contamination
<b>Survey Results:</b>	<ul style="list-style-type: none"> <li>■ No contamination detected on perimeters</li> <li>■ No change since survey of 7/88</li> </ul>	
<b>Corrective Action:</b>	Continue to monitor for change	

**TABLE 5.1 CONTINUED**

<b>Site Name:</b>	216-U-10 Stabilized Pond	
<b>Survey Frequency:</b>	Semi-Annual	<b>Posting:</b> Underground/Surface
<b>Survey Results:</b>	<ul style="list-style-type: none"> <li>■ New contamination of 5000 d/m noted on SW side, Existing SC zone shows 5 to 10K d/m with animal burrows noted. ref 8810EP200-008</li> <li>■ This is an increase since last surveyed</li> </ul>	
<b>Corrective Action:</b>	Continue to monitor for change	

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<b>Site Name:</b>	216-Z-12	
<b>Survey Frequency:</b>	Annual	<b>Posting:</b> Surface Contamination
<b>Survey Results:</b>	<ul style="list-style-type: none"> <li>■ No contamination detected</li> <li>■ No change since routine survey of 7/88</li> </ul>	
<b>Corrective Action:</b>	Continue to monitor for change	

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<b>Site Name:</b>	216-Z-8 Reverse well	
<b>Survey Frequency:</b>	Annual	<b>Posting:</b> Surface Contamination
<b>Survey Results:</b>	<ul style="list-style-type: none"> <li>■ No contamination detected</li> <li>■ No change since last survey</li> </ul>	
<b>Corrective Action:</b>	Continue to monitor for change	

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<b>Site Name:</b>	207-T Retention Basin	
<b>Survey Frequency:</b>	Annual	<b>Posting:</b> Surface Contamination
<b>Survey Results:</b>	<ul style="list-style-type: none"> <li>■ Specks from 2K to 70K d/m identified around perimeter. SC zone extended to include specks.</li> <li>■ Similar contamination noted on 7/88 survey</li> </ul>	
<b>Corrective Action:</b>	RPT's should continue to monitor for change. Major decontamination effort needed in this and surrounding area. Ref. SCIR # 8907EP200-032	

**TABLE 5.1 CONTINUED**

**Site Name:** 207-A Retention Basin  
**Survey Frequency:** Annual **Posting:** Surface Contamination  
**Survey Results:** ■ No contamination reported around perimeters  
 ■ No change since survey of 7/88  
**Corrective Action:** Continue to monitor for change

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**Site Name:** 216-Z-18 Crib  
**Survey Frequency:** Annual **Posting:** Underground  
 Radioactive Material  
**Survey Results:** ■ No contamination detected  
 ■ No change since 7/88  
**Corrective Action:** No action required

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**Site Name:** 216-Z-16 Crib  
**Survey Frequency:** Annual **Posting:** Underground  
 Radioactive Material  
**Survey Results:** ■ No contamination detected  
 ■ No change since 7/88 survey  
**Corrective Action:** No action required

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**Site Name:** 216-B-63 Ditch Bank Survey Plots  
**Survey Frequency:** Annual **Posting:** Surface Contamination  
**Survey Results:** ■ No contamination on survey plots  
 ■ No change since 7/88 survey  
**Corrective Action:** Continue to monitor for change

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**Site Name:** 216-S-17 Stabilized Pond  
**Survey Frequency:** Semi-Annual **Posting:** Underground  
 Radioactive Material  
**Survey Results:** ■ No contamination detected  
 ■ No change since 9/88 survey  
**Corrective Action:** No action required

**TABLE 5.1 CONTINUED**

**Site Name:** 216-B-3 Pond Survey Plots

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

**Survey Results:** ■ No contamination detected  
 ■ No change since 7/88 survey

**Corrective Action:** Continue to monitor for change. Note sites 7,8,9 obstructed by spoil pile.

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**Site Name:** 216-S-10 Ditch

**Survey Frequency:** Semi-Annual                      **Posting:** Underground

**Survey Results:** ■ No contamination detected  
 ■ No change since 9/88 survey

**Corrective Action:** No action required

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## 5.2 SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS ISSUED IN JULY

No SCIR's were issued as a result of July surveys.

## 5.3 SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS CLOSED IN JULY

One SCIR was closed as a result of July surveys. Inspection report #EP-88-017, the 618-5 Burial Ground, was closed as a result of decontamination and stabilization efforts.

## 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-nine 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

<b>Site/Condition:</b>	216-A-24 Crib	2000 to 800,000 d/m on vegetation and surface
<b>Report #:</b>	ESC-84-02-02	<b>Date Issued:</b> 8/84
<b>Action Required:</b>	Remove vegetation and clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Stabilization complete. Awaiting soil sampling prior to posting status change. Scheduled completion by 10/89	
<b>Site/Condition:</b>	UN-216-E-17	10,000 to 1,000,000 d/m on surface
<b>Report #:</b>	ESC-84-02-03	<b>Date Issued:</b> 8/84
<b>Action Required:</b>	Remove tumbleweeds and clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Work is scheduled to begin and be complete in FY 1990	
<b>Site/Condition:</b>	UN-216-E-31	2,000 to 1,000,000 d/m on tumbleweeds and surface
<b>Report #:</b>	ESC-84-02-04	<b>Date Issued:</b> 8/84
<b>Action Required:</b>	Remove tumbleweeds and clean the surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Site scheduled for clean-up in FY 1991	
<b>Site/Condition:</b>	A,AX,AY,AZ,B,BX,BY Tank Farm Perimeters: specks of contamination up to > 1,000,000 d/m and 90 mr/hr	
<b>Report #:</b>	ESC-85-004	<b>Date Issued:</b> 6/85
<b>Action Required:</b>	Clean perimeter surfaces	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Past interim clean-up has been ineffective due to contamination sources from inside the tank farms. Resolution and clean-up scheduled for FY 1994	

TABLE 5.4

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**STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS**


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<b>Site/Condition:</b>	UN-216-E-23	
<b>Report #:</b>	ESC-85-019	<b>Date Issued:</b> 11/85
<b>Action Required:</b>	Clean surface and remove tumbleweeds	
<b>Actionee:</b>	Manager, B Plant Operations	
<b>Current Status:</b>	Tumbleweeds have been removed. Site scheduled for completion in FY 1990.	
<hr/>		
<b>Site/Condition:</b>	216-B-57 Crib	15,000 to 600,000 d/m on surface
<b>Report #:</b>	ESC-85-016	<b>Date Issued:</b> 2/86
<b>Action Required:</b>	Clean surface and stabilize site	
<b>Actionee:</b>	Manager , Decontamination and Decommissioning	
<b>Current Status:</b>	Site scheduled for completion in FY 1990	
<hr/>		
<b>Site/Condition:</b>	West of 216-B-64 trench	2,000 to 500,000 d/m on surface and ant hill
<b>Report #:</b>	ECU-86-016	<b>Date Issued:</b> 4/86
<b>Action Required:</b>	Poison ants and clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Ants have been poisoned three times since 1985, most recently in 1989. Clean-up scheduled for FY 1992.	
<hr/>		
<b>Site/Condition:</b>	207-SRetention Basin	4,000 to 100,000 d/m on surface and tumbleweed fragments
<b>Report #:</b>	ECU-86-022	<b>Date Issued:</b> 8/86
<b>Action Required:</b>	Clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Estimated completion date is FY 1990	

TABLE 5.4

STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS

<b>Site/Condition:</b>	216-Z-5 Crib:	100,000 d/m on surface and tumbleweed fragments. Site has cave-in potential.
<b>Report #:</b>	ECU-86-026	<b>Date Issued:</b> 8/86
<b>Action Required:</b>	Clean surface and stabilize site	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	This site is addressed by the Crib Isolation & Stabilization Program. Stabilization work has begun and is expected to be complete in FY 1989.	
<b>Site/Condition:</b>	216-Z-7 Crib	30,000 to 1,000,000 d/m including dose rate of 20 mr/hr on tumbleweed fragments and surface. Site has high cave-in potential.
<b>Report #:</b>	ECU-86-028	<b>Date Issued:</b> 8/86
<b>Action Required:</b>	Clean surface and stabilize site	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Engineering study of cave-in hazard required prior to clean-up. Estimated completion date is 9/30/93	
<b>Site/Condition:</b>	218-E-12B	10,000 to 300,000 d/m on surface as a result of termite intrusion.
<b>Report #:</b>	ECU-86-036	<b>Date Issued:</b> 10/86
<b>Action Required:</b>	Clean site	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	300,000 d/m spot has been cleaned. Termites have been exterminated. Estimated completion in 1993	

TABLE 5.4

STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS

Site/Condition:	UN-216-W-7 :	3,000 to 1,000,000 d/m on surface, dose rates to 10 mr/hr
Report #:	ECU-86-045	Date Issued: 10/86
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Estimated completion date is 9/30/89	
Site/Condition:	UN-216-W-24:	50,000 d/m on surface
Report #:	ECU-86-046	Date Issued: 10/86
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Estimated completion date is 9/30/91	
Site/Condition:	UN-216-W-29:	5000 to 20,000 d/m on surface
Report #:	ECU-86-047	Date Issued: 10/86
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Estimated completion date is 9/30/90	
Site/Condition:	UN-216-W-30 :	10,000 to 1,000,000 d/m on surface
Report #:	ECU-86-048	Date Issued: 10/86
Action Required:	Clean surface	
Actionee:	Manager , Decontamination and Decommissioning	
Current Status:	Estimated completion date is 9/30/92	
Site/Condition:	UN-216-W-31:	2,000 to 500,000 d/m on surface
Report #:	ECU-86-049	Date Issued: 10/86
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Estimated completion date is 9/30/92	

TABLE 5.4

STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS

Site/Condition:	216-T-34 Crib:	10,000 to 50,000 d/m on surface, 300,000 d/m and dose rates of 5 mr/hr on live tumbleweeds.
Report #:	ECU-86-053	Date Issued: 11/86
Action Required:	Remove tumbleweeds and clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Clean-up scheduled for FY 1989	
Site/Condition:	618-2&3 Burial grounds:	2,000 to 70,000 d/m on surface
Report #:	ECU-86-057	Date Issued: 12/86
Action Required:	Clean surface and fill in depressions	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Stabilization work in progress. Completion scheduled for 9/30/89.	
Site/Condition:	216-C-8 French Drain:	3000 to 50,000 d/m on surface
Report #:	ECU-87-10	Date Issued: 4/87
Action Required:	Clean site	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Estimated completion date is 9/30/89	
Site/Condition:	241-S-SX-SY Tank Farm Perimeters:	2000 to 1,000,000 d/m on surface
Report #:	ECU-87-20	Date Issued: 5/87
Action Required:	Clean perimeter fence lines	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Estimated completion date of 9/30/89	

TABLE 5.4

**STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS**

<b>Site/Condition:</b>	216-A-6:	2000 to 20,000 d/m on tumbleweeds and the surface
<b>Report #:</b>	ECU-87-21	<b>Date Issued:</b> 5/87
<b>Action Required:</b>	Remove tumbleweeds and clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Estimated Completion date of 9/30/89	
<b>Site/Condition:</b>	216-A-7 Crib:	12,000 to 15,000 d/m on surface plus subsurface shine
<b>Report #:</b>	ECU-87-22	<b>Date Issued:</b> 5/87
<b>Action Required:</b>	Clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Estimated completion date of 9/30/89	
<b>Site/Condition:</b>	204 S Stabilized Area:	150,000 d/m on surface with dose rates to 25 mr/hr
<b>Report #:</b>	ECU-87-28	<b>Date Issued:</b> 8/87
<b>Action Required:</b>	Clean the surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Decontamination is in progress. Estimated completion date is 9/30/89	
<b>Site/Condition:</b>	216-Z-10 Crib:	10,000 to 250,000 d/m on surface, rabbit feces and tumbleweed fragments
<b>Report #:</b>	EP-87-33	<b>Date Issued:</b> 8/87
<b>Action Required:</b>	Clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Decontamination is in progress. Estimated completion date is 9-30-89	

TABLE 5.4

**STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS**

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Site/Condition: 218-W-9 Vault: 100,000 d/m on surface

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

Action Required: Clean surface

Actionee: Manager, Decontamination and Decommissioning

Current Status: Decontamination is in progress. Estimated completion date of 9/30/89

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Site/Condition: 216-S-6 Crib: 2000 to 200,000 d/m on surface, and on live and dead rabbitbrush

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

Action Required: Remove vegetation from site and clean surface

Actionee: Manager, Decontamination and Decommissioning

Current Status: Decontamination is in progress. Estimated completion date of 9/30/89

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Site/Condition: UN-216-W-26: 5000 d/m on weeds and surface

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

Action Required: Clean surface

Actionee: Manager, Decontamination and Decommissioning

Current Status: Estimated completion date of 9/30/91

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Site/Condition: UN-216-E-32: 40,000 d/m on surface

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

Action Required: Clean surface

Actionee: Manager, Decontamination and Decommissioning

Current Status: Decontamination is in progress. Estimated completion date of 9/30/89

TABLE 5.4

**STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS**

<b>Site/Condition:</b>	216-B-7A & B Cribs:	50,000 d/m on surface
<b>Report #:</b>	EP-87-45	<b>Date Issued:</b> 11/87
<b>Action Required:</b>	Clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Estimated completion date of 9/30/92	
<b>Site/Condition:</b>	216-B-9 Crib and tile field:	30,000 d/m on surface
<b>Report #:</b>	EP-87-46	<b>Date Issued:</b> 11/87
<b>Action Required:</b>	Clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Estimated completion date of 9/30/92	
<b>Site/Condition:</b>	216-B-43 through 50 Cribs:	3000 to 60,000 d/m on surface
<b>Report #:</b>	EP-87-47	<b>Date Issued:</b> 11/87
<b>Action Required:</b>	Clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Estimated completion date of 9/30/92	
<b>Site/Condition:</b>	UN-216-E-37:	Activity greater than 1,000,000 d/m on surface with dose rates up to 25 mR/hr
<b>Report #:</b>	EP-87-50	<b>Date Issued:</b> 12/87
<b>Action Required:</b>	Clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Decontamination is in progress. Estimated completion date is 9/30/89	

TABLE 5.4

**STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS**

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**Site/Condition:** Tank Unloading Station,T-Plant: 100,000 d/m b/g and 7,000 d/m alpha smearable contamination on duct work. Surface contamination also present.

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

**Action Required:** Clean surface

**Actionee:** Manager, Decontamination and Decommissioning

**Current Status:** Decontamination is in progress. Scheduled completion date is 9/30/89

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**Site/Condition:** 276-U Basin: 4000 to 200,000 d/m on surfaces

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

**Action Required:** Clean surface

**Actionee:** Manager, Decontamination and Decommissioning

**Current Status:** Estimated completion date of 9/30/90

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**Site/Condition:** 216-A-40 Basin : 5000 to 50,000 d/m on tumbleweed fragments and surface

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

**Action Required:** Clean surface

**Actionee:** Manager, Tank Farm Operations

**Current Status:** Clean-up is in progress. Estimated completion date of 12/30/89

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**Site/Condition:** WR Vault: 25,000 d/m on surface

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

**Action Required:** Clean surface

**Actionee:** Manager, Decontamination and Decommissioning

**Current Status:** Decontamination in progress. Estimated completion date of 9/30/89

TABLE 5.4

**STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS**

<b>Site/Condition:</b>	216-U- 1&2 Cribs:	2,500 to 8,000 d/m on surfaces of outside perimeter
<b>Report #:</b>	EP-88-15	<b>Date Issued:</b> 9/88
<b>Action Required:</b>	Clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Engineering study to be complete by 9/30/89	
<b>Site/Condition:</b>	216-U-10 Pond:	Contamination to 10,000 d/m on surface
<b>Report #:</b>	8810EP200-008	<b>Date Issued:</b> 10/88
<b>Action Required:</b>	Clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Engineering study to be complete by 9/30/89	
<b>Site/Condition:</b>	216-U-11 Overflow:	Contamination to 10,000 d/m on surface
<b>Report #:</b>	8810EP200-009	<b>Date Issued:</b> 10/88
<b>Action Required:</b>	Clean surface	
<b>Actionee:</b>	Manager, Decontamination and Decommissioning	
<b>Current Status:</b>	Estimated completion date 9/30/89. Awaiting verification to remove this from Open Status	
<b>Site/Condition:</b>	UN-216-W-33:	Contamination from 5,000 to 25,000 d/m
<b>Report #:</b>	8810EP200-012	<b>Date Issued:</b> 10/88
<b>Action Required:</b>	Clean surface	
<b>Actionee:</b>	Manager, Tank Farm Operations	
<b>Current Status:</b>	Clean-up in progress. Estimated completion date is 9/30/89	

TABLE 5.4

STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS

<p><b>Site/Condition:</b> 216-B-11A &amp; B Reverse Wells</p> <p><b>Report #:</b> 8810EP200-025</p> <p><b>Action Required:</b> Clean surface</p> <p><b>Actionee:</b> Manager, Decontamination and Decommissioning</p> <p><b>Current Status:</b> Necessary corrective actions are being investigated.</p>	<p>Spotty contamination from 10,000 to 25,000 d/m on site perimeter</p> <p><b>Date Issued:</b> 11/88</p>
<hr/>	
<p><b>Site/Condition:</b> 216-B-64 Retention Basin:</p> <p><b>Report #:</b> 8810EP200-026</p> <p><b>Action Required:</b> Clean surface</p> <p><b>Actionee:</b> Manager, B-Plant Operations</p> <p><b>Current Status:</b> This area has been treated with herbicides to prevent growth of contaminated vegetation.</p>	<p>Spotty contamination from 3000 to 15,000 d/m on surface</p> <p><b>Date Issued:</b> 11/88</p>
<hr/>	
<p><b>Site/Condition:</b> 216-T-18 Crib</p> <p><b>Report #:</b> 8810EP200-027</p> <p><b>Action Required:</b> Clean surface</p> <p><b>Actionee:</b> Manager, Decontamination and Decommissioning</p> <p><b>Current Status:</b> Feasibility investigations to be done in FY 1989</p>	<p>Spotty contamination from 2000 to 10,000 d/m on surface from termite emergence</p> <p><b>Date Issued:</b> 10/88</p>

TABLE 5.4

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**STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS**


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**Site/Condition:** 216-T-26-28 Cribs 2000 to 25,000 d/m on surface

**Report #:** 8811EP200-028      **Date Issued:** 11/88

**Action Required:** Clean surface

**Actionee:** Manager, Decontamination & Decommissioning

**Current Status:** Surface contamination zone has been extended to include new contamination. The zone is also inclusive of contamination mentioned on Inspection Report # 86-052 which has been closed due to redundancy.

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**Site/Condition:** UN-216-E-16:      Surface contamination from 10,000 to 1,000,000 d/m with Dose rates of 15 mR/hr

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

**Action Required:** Clean surface

**Actionee:** Manager, Purex Operations

**Current Status:** Clean-up in progress. 6/09/89 completion date missed due to training requirements for additional personnel

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**Site/Condition:** 216-A-36 A&B      30,000 d/m smearable on North riser

**Report #:** 8907EP200-031      **Date Issued:** 7/89

**Action Required:** Clean surfaces

**Actionee:** Manager, Tank Farm Operations

**Current Status:** Smearable contamination on North riser

---

**Site/Condition:** 216-T-14-17 :      4000 d/m specks on stabilized site

**Report #:** 8907EP200-032      **Date Issued:** 7/89

**Action Required:** Clean surface

**Actionee:** Manager, Decontamination and Decommissioning

**Current Status:** Zone has been extended from the adjacent UN-216-W-31 site. Blowing sand from this area is probably causing the contamination on the stabilized site.

TABLE 5.4

**STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS**

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**Site/Condition:** 241-ER Diversion Box                      Surface contamination up to 90 mr/hr.

**Report #:** 8908EP200-034                                      **Date Issued:** 08/89

**Action Required:** Clean surface

**Actionee:** Manager, Tank Farms Operations

**Current Status:** Partial decontamination achieved

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**Site/Condition:** 241-U Farm Perimeter                      Contamination up to 300,000 d/m

**Report #:** 8908200EP-035                      **Date Issued:** 8/89

**Action Required:** Clean surface

**Actionee:** Manager, Decontamination and Decommissioning

**Current Status:** SCIR response needed. Increasing contamination levels indicate a need for U-Farm Perimeters to be added to this tracking system.

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## 6.0 SUMMARY

Twenty-four sites were surveyed in July 1989 (Table 5.1).

No SCIR's were issued (Table 5.2).

One SCIR was closed (Table 5.3).

Forty-nine 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

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

WHC-CM-4-10, Radiation Protection

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

WHC-CM-7-4, Operational Environmental Monitoring

WHC-CM-7-5, Environmental Compliance Manual