

SUPPORTING DOCUMENT

2. Title
Environmental Radiological Survey Summary
for August 1989

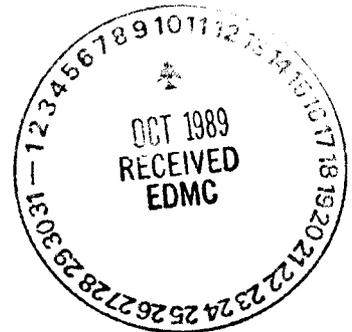
3. Number
WHC-SD-SQA-EV-20042

4. Rev. No.
0

5. Key Words
Environmental Surveillance

6. Author
A.R. Johnson
Name (Type or Print) A.R. Johnson 09-29-89
Signature *A.R. Johnson* 09-29-89
Organization Code 80322

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



8. PURPOSE AND USE OF DOCUMENT - This document was prepared for use within Westinghouse Hanford Company and is to be used only to perform, direct, or integrate work under U.S. Department of Energy contracts. Distribution external to WHC requires the appropriate document clearance.

PATENT STATUS - This document copy, since it is transmitted in advance of patent clearance, is made available in confidence solely for use in performance of work under contracts with the U.S. Department of Energy. This document is not to be published nor its contents otherwise disseminated or used for purposes other than specified above before patent approval for such release or use has been secured, upon request, from the U.S. Department of Energy, Patent Attorney, Richland Operations Office, Richland, WA.

DOES NOT CONTAIN CLASSIFIED OR UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION

Reviewing Official / ADC: *Paul Casey*
Date: 10/2/89

9. ENGINEERING RELEASE STAMP
(Does not authorize public dissemination).

OFFICIAL RELEASE BY WHC 48
DATE OCT 3 1989
Station #4

10. Impact Level

4

**SUPPORTING DOCUMENT COVER SHEET
COMPLETION INSTRUCTIONS**

1. **PAGE 1 OF _____** - Enter total page count.
2. **TITLE** - Enter the title of the Supporting Document to be released.
3. **NUMBER** - Enter the unique document identification number obtained from Engineering Document Control.
4. **REV. NO.** - Enter the current revision number of the Supporting Document to be released.
5. **KEY WORDS** - Enter specific words that are input to a database that will aid in future retrieval of the document, e.g., project, task, selected words from the title, etc.
6. **AUTHOR** - Enter the printed/typed name of the Supporting Document author, his signature, and the author's organization code.
7. **ABSTRACT** - Enter a brief summary of the document content.
8. **CAVEATS** - Reminders to the user(s) and those on distribution that the Supporting Document is not approved for public release until proper reviews/approvals have been obtained.
9. **ENGINEERING RELEASE STAMP** - The release stamp is affixed by Engineering Document Control to certify that the Supporting Document is approved for the intended use, and is accountable and retrievable. The release stamp is not an authorization for public release and does not signify that the document is approved for public dissemination.
10. **IMPACT LEVEL** - Enter the applicable Impact Level for the Supporting Document. Reference MRP 5.43 and EP-1.7.

ENVIRONMENTAL RADIOLOGICAL SURVEY
REPORT FOR AUGUST 1989

A. R. JOHNSON
C. R. HUCKFELDT

ENVIRONMENTAL DIVISION
ENVIRONMENTAL ASSURANCE
ENVIRONMENTAL PROTECTION
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 August 1989 survey results and the status of actions required in past reports are summarized below:

- There were 23 radiological surveys, summarized in Table 5.1, completed during August 1989.
- Three Surveillance and Compliance Inspection Reports, summarized in Table 5.2, were issued as a result of August surveys.
- Three Surveillance and Compliance Inspection Report, summarized in table 5.3, were closed in August.
- Forty-eight 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	40
B Plant	2
PUREX	1
Tank Farm Process Operations	5

TABLE OF CONTENTS

1.0 INTRODUCTION 7

 1.1 OBJECTIVES 7

 1.2 SURVEY RESULTS FORMAT 7

2.0 ENVIRONMENTAL PROTECTION STANDARDS 8

3.0 SURVEILLANCE & COMPLIANCE INSPECTION REPORTS 9

4.0 SURVEY METHODS AND PRACTICES 10

 4.1 ROAD SURVEYS 10

 4.2 WASTE SITES AND OTHER RADIATION AREA SURVEYS 10

5.0 SURVEY RESULTS 11

 5.1 AUGUST RADIOLOGICAL SURVEY RESULTS 11

 5.1 TABLE OF COMPLETED SURVEYS 12

 5.2 SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS ISSUED IN AUGUST . 18

 5.3 SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS CLOSED IN AUGUST . 18

 5.4 STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS . . 22

6.0 SUMMARY 36

7.0 REFERENCES 36

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 23 environmental radiological surveys conducted during August 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 SURVEILLANCE & COMPLIANCE INSPECTION REPORTS

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

It should be noted that active cribs retain a "Surface Contamination" status, even though no contamination is currently detected on the surface, as a precautionary measure because of the existing risk of contamination from risers and vents.

5.1 AUGUST RADIOLOGICAL SURVEY RESULTS

There were 23 sites surveyed in August. 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 were three SCIR's issued as a result of the August surveys (Table 5.2).

TABLE 5.1 TABLE OF COMPLETED SURVEYS

Site Name:	216-S-7 Crib	
Survey Frequency:	Annual	Posting: Surface/Underground
Survey Results:	<ul style="list-style-type: none"> ■ Perimeter survey only due to Cave-in potential; No contamination detected. ■ No change since survey of 8/88 	
Corrective Action:	Continue to monitor for change	

Site Name:	216-S-13 Crib	
Survey Frequency:	Annual	Posting: Surface/Underground
Survey Results:	<ul style="list-style-type: none"> ■ Perimeter survey only due to Cave-in potential; No contamination detected. ■ No change since survey of 8/88 	
Corrective Action:	Continue to monitor for change	

Site Name:	216-S-9 Crib	
Survey Frequency:	Annual	Posting: Surface Contamination
Survey Results:	<ul style="list-style-type: none"> ■ No contamination detected ■ No change since survey of 8/88 	
Corrective Action:	Examine possibility of posting status change	

Site Name:	216-U-3 Crib	
Survey Frequency:	Annual	Posting: Underground
Survey Results:	<ul style="list-style-type: none"> ■ No contamination detected ■ No change since survey of 8/88 	
Corrective Action:	No action required	

TABLE 5.1 CONTINUED

Site Name:	218-W-1,2,4A & 4B, and 11 Stabilized Burial Site	
Survey Frequency:	Semi-Annual	Posting: Underground
Survey Results:	<ul style="list-style-type: none"> ■ Small area of 10,000 d/m on W-2 ■ Area of 6000 d/m reported on 8/88 covered by blow sand 	
Corrective Action:	Decontaminate and continue to monitor	
<hr/>		
Site Name:	Road Survey (Rt. 4S to 200 East hill)	
Survey Frequency:	Quarterly	Posting: Not Applicable
Survey Results:	<ul style="list-style-type: none"> ■ No contamination reported ■ No change since 5/89 	
Corrective Action:	No action required	
<hr/>		
Site Name:	216-S-1 and 2 Cribs	
Survey Frequency:	Annual	Posting: Surface Contamination
Survey Results:	<ul style="list-style-type: none"> ■ Perimeters only surveyed due to Cave-in potential. No contamination detected. ■ No change since 8/88 	
Corrective Action:	Continue to monitor for change; located inside the UN-216-W-24, reference SCIR #ECU-86-046	
<hr/>		
Site Name:	216-S-15 Crib	
Survey Frequency:	Annual	Posting: Surface Contamination
Survey Results:	<ul style="list-style-type: none"> ■ Hot spot of 200K d/m at North end of site ■ This is an increase in activity since survey of 8/88. 	
Corrective Action:	Continue to monitor for change; located inside the UN-216-W-24, reference SCIR #ECU-86-046	

TABLE 5.1 CONTINUED

Site Name:	216-S-3 Crib	
Survey Frequency:	Annual	Posting: Surface Contamination
Survey Results:	<ul style="list-style-type: none"> ■ 5000 to 20,000 d/m specks along west edge of site ■ Similar contamination reported in 8/88 survey 	
Corrective Action:	Continue to monitor for change; located inside the UN-216-W-24, reference #ECU-86-046	

Site Name:	216-S-8 Crib	
Survey Frequency:	Annual	Posting: Surface Contamination
Survey Results:	<ul style="list-style-type: none"> ■ 1500 to 15,000 d/m specks on west edge of site ■ Similar contamination reported on 8/88 	
Corrective Action:	Continue to monitor for change; located inside the UN-216-W-24, reference #ECU-86-046	

Site Name:	216-S-16 Pond	
Survey Frequency:	Semi-Annual	Posting: Underground
Survey Results:	<ul style="list-style-type: none"> ■ No contamination detected ■ No change since survey of 8/88 	
Corrective Action:	No action required	

Site Name:	216-S-12 Crib	
Survey Frequency:	Annual	Posting: Underground
Survey Results:	<ul style="list-style-type: none"> ■ No contamination detected ■ No change since survey of 8/88 	
Corrective Action:	No action required	

TABLE 5.1 CONTINUED

Site Name:	216-S-22 Crib	
Survey Frequency:	Annual	Posting: Underground
Survey Results:	<ul style="list-style-type: none"> ■ No contamination reported ■ No change since survey of 8/88 	
Corrective Action:	No action required	

Site Name:	216-S-4 French Drain	
Survey Frequency:	Annual	Posting: Surface Contamination
Survey Results:	<ul style="list-style-type: none"> ■ No contamination detected ■ No change since survey of 8/88 	
Corrective Action:	Examine possible posting status change	

Site Name:	216-U-8 Crib	
Survey Frequency:	Annual	Posting: Surface Contamination
Survey Results:	<ul style="list-style-type: none"> ■ No contamination detected ■ No change since survey of 8/88 	
Corrective Action:	Posting status change to concur with clean-up of UN-216-W-33, reference SCIR #8810EP200-012	

Site Name:	216-S-21 Crib	
Survey Frequency:	Annual	Posting: Surface Contamination
Survey Results:	<ul style="list-style-type: none"> ■ Perimeter only surveyed due to Cave-in potential ■ No contamination detected; No change since survey of 8/88 	
Corrective Action:	Continue to monitor for change	

TABLE 5.1 CONTINUED

Site Name:	216-S-6 Crib	
Survey Frequency:	Annual	Posting: Surface Contamination
Survey Results:	<ul style="list-style-type: none"> ■ Extensively contaminated risers and surfaces. Densely contaminated with live and dead vegetation. ■ No change since survey of 8/88 	
Corrective Action:	Decontamination effort needed, reference SCIR # EP-87-35	
<hr/>		
Site Name:	216-U-1 & 2 Cribs	
Survey Frequency:	Annual	Posting: Surface Contamination
Survey Results:	<ul style="list-style-type: none"> ■ Contamination up to 6500 d/m reported along the North and East sides of crib outside crib boundaries. Zone has been extended to include this contamination migration. ■ Similar contamination reported on 8/88 	
Corrective Action:	Site clean-up requested, reference SCIR #EP-88-15	
<hr/>		
Site Name:	216-U-11 Ditches	
Survey Frequency:	Semi-Annual	Posting: Underground
Survey Results:	<ul style="list-style-type: none"> ■ Removable contamination up to 3000 d/m found on South side of site. ■ Similar contamination noted on last survey 	
Corrective Action:	Site clean-up requested, reference SCIR # 8810EP200-009	
<hr/>		
Site Name:	216-S-23 Crib	
Survey Frequency:	Annual	Posting: Surface Contamination
Survey Results:	<ul style="list-style-type: none"> ■ Four spots ranging from 4000 to 5000 d/m noted on West side of site. ■ Similar contamination noted on 8/88 survey 	
Corrective Action:	Continue to monitor for change	

TABLE 5.1 CONTINUED

Site Name:	216-S-19 Pond	
Survey Frequency:	Semi-Annual	Posting: Underground
Survey Results:	<ul style="list-style-type: none"> ■ No contamination detected side of site. ■ No change since previous survey 	
Corrective Action:	No action required	

Site Name:	216-U-5 Crib	
Survey Frequency:	Annual	Posting: Surface Contamination
Survey Results:	<ul style="list-style-type: none"> ■ No contamination detected ■ No change since 8/88 	
Corrective Action:	Posting status change to concur with clean-up of UN-216-W-9 and WR Vault, reference SCIR #EP-88-10	

Site Name:	216-U-6 Crib	
Survey Frequency:	Annual	Posting: Surface Contamination
Survey Results:	<ul style="list-style-type: none"> ■ No contamination detected ■ No change since survey of 8/88 	
Corrective Action:	Posting status change to concur with clean-up of UN-216-W-9 and WR Vault, reference SCIR #EP-88-10	
=====		

5.2 SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS ISSUED IN AUGUST

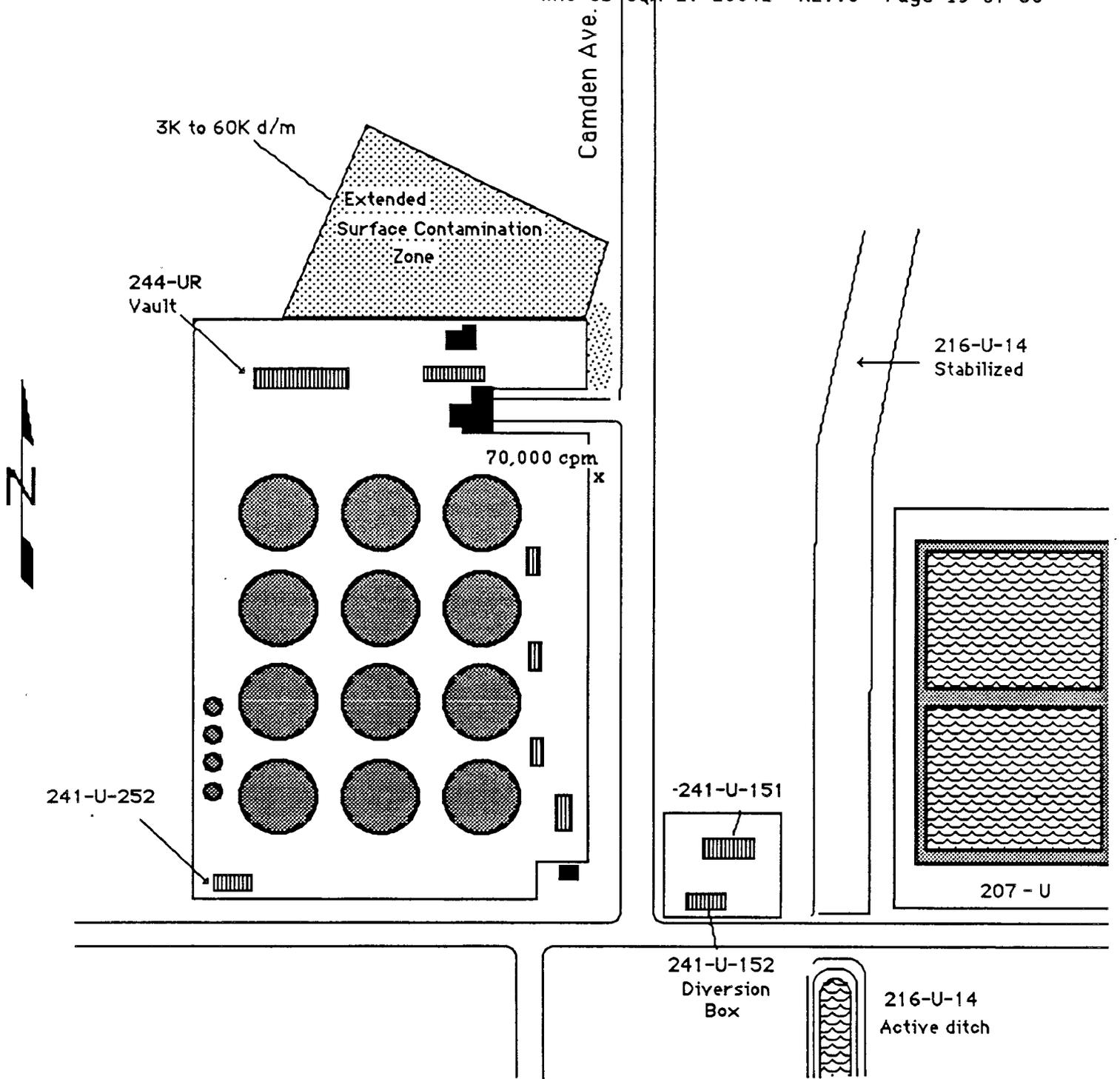
Three SCIR's 8908EP200-035 (241-U Farm perimeters), 8909EP200-036 (241- B Farm Perimeters) and 8909EP200-037 (244-A Lift Station) were issued as a result of August surveys. These SCIR's are summarized in Table 5.2. The contamination migration around the 241-U Farm is depicted on Figure 1, the contamination migration around the 241-B Farm is depicted on Figure 2 and the contamination spread at the 244-A Lift Station is depicted on Figure 3 included in this report.

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

<u>SITE</u>	<u>REPORT #</u>	<u>ISSUED TO</u>	<u>REQUIRED ACTION</u>
241-U Tank Farm Perimeters	8908EP200-035	D&D	Decontaminate area
241-B Tank Farm Perimeters	8909EP200-036	Tank Farm Surveillance	Decontaminate area
244 A Lift Station	8909EP200-037	Tank Farm Surveillance	Decontaminate area

5.3 SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS CLOSED IN AUGUST

Three SCIR's were closed as a result of August surveys. Inspection report #ESC-84-02-02 (216-A-24 Crib), #ECU-86-057 (618-2,3 Burial grounds) and #8907EP200-031 (216-A-36A Crib) were closed after it was verified that the compliance requirements cited were met.

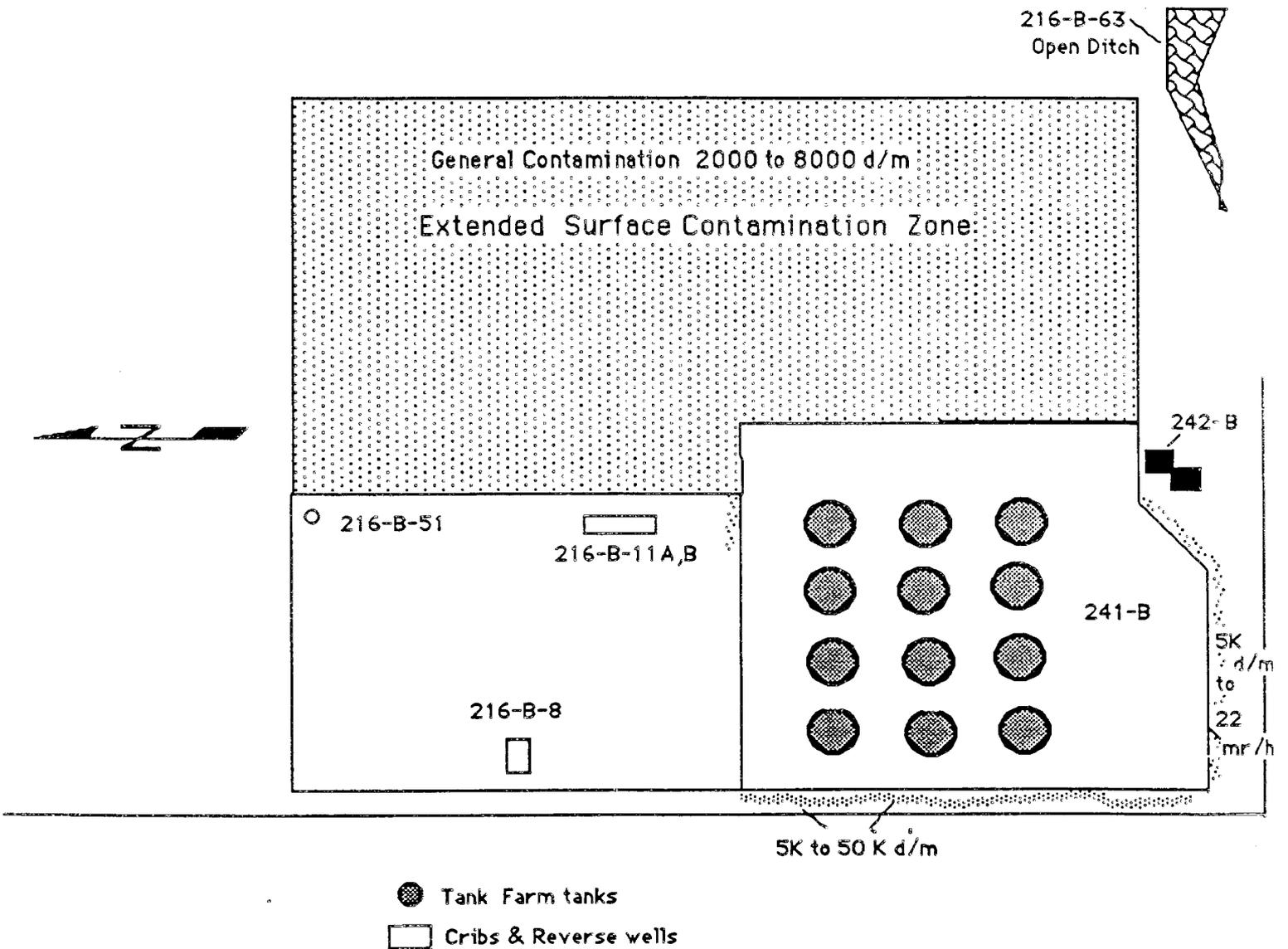


U-Farm Perimeter Contamination
Figure 1

● Tank Farm Tanks

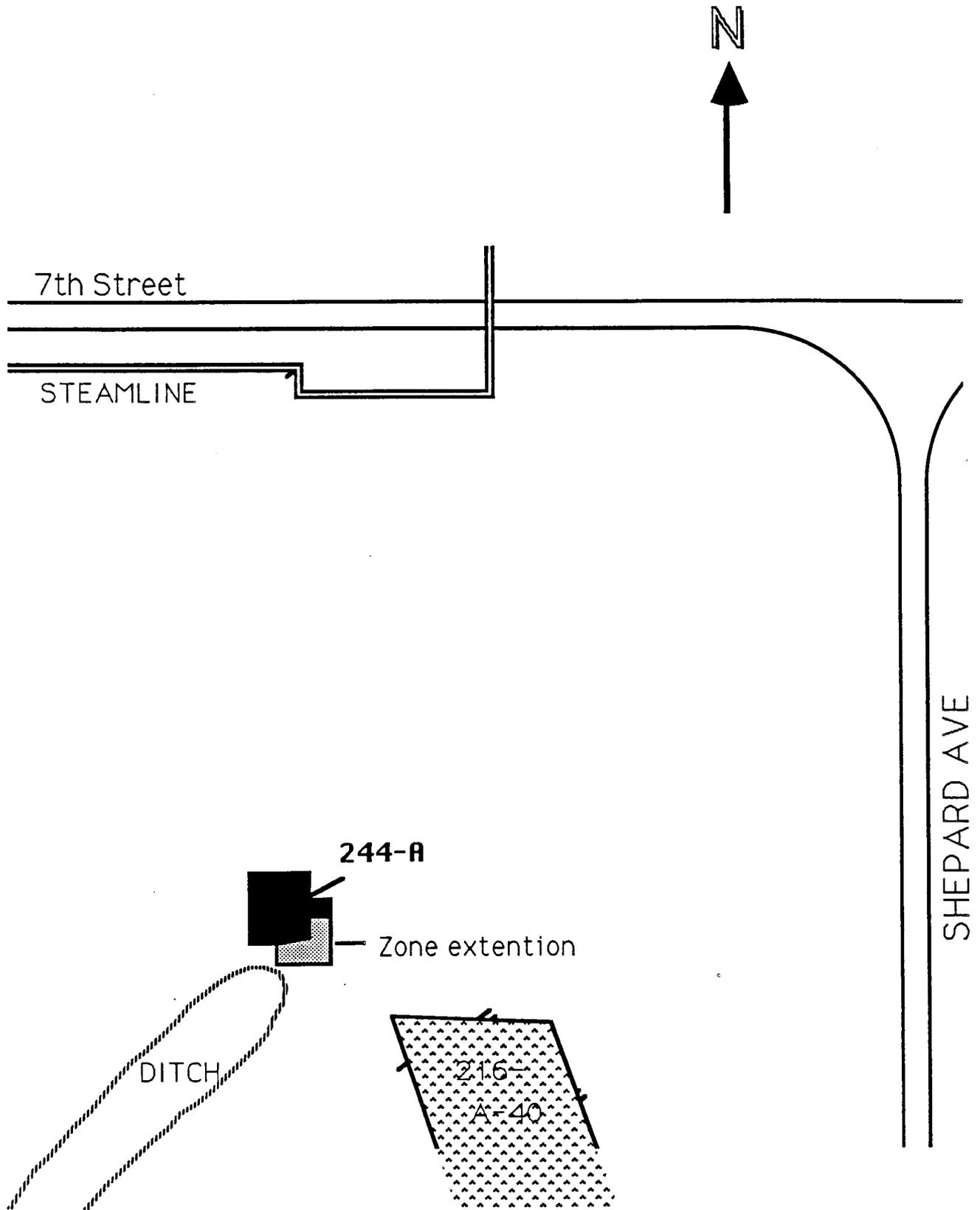
B-Farm Perimeter Contamination

Figure 2



244-A Lift Station Contamination

Figure 3



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-eight 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:	UN-216-E-17	10,000 to 1,000,000 d/m on surface
Report #:	ESC-84-02-03	Date Issued: 8/84
Action Required:	Remove tumbleweeds and clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Work is scheduled to begin and be complete in FY 1990	

Site/Condition:	UN-216-E-31	2,000 to 1,000,000 d/m on tumbleweeds and surface
Report #:	ESC-84-02-04	Date Issued: 8/84
Action Required:	Remove tumbleweeds and clean the surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Site scheduled for clean-up in FY 1991	

Site/Condition:	A,AX,AY,AZ,B,BX,BY Tank Farm Perimeters: specks of contamination up to > 1,000,000 d/m and 90 mr/hr	
Report #:	ESC-85-004	Date Issued: 6/85
Action Required:	Clean perimeter surfaces	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Past interim clean-up has been ineffective due to contamination sources from inside the tank farms. Resolution and clean-up scheduled for FY 1994	

Site/Condition:	UN-216-E-23	
Report #:	ESC-85-019	Date Issued: 11/85
Action Required:	Clean surface and remove tumbleweeds	
Actionee:	Manager, B Plant Operations	
Current Status:	Tumbleweeds have been removed. Site scheduled for completion in FY 1990.	

TABLE 5.4

STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS

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

TABLE 5.4

STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS

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

Site/Condition: 216-A-6: 2000 to 20,000 d/m on tumbleweeds and the
surface

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

Action Required: Remove tumbleweeds and clean surface

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

Site/Condition:	216-A-7 Crib:	12,000 to 15,000 d/m on surface plus subsurface shine
Report #:	ECU-87-22	Date Issued: 5/87
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Estimated completion date of 9/30/89	

Site/Condition:	204 S Stabilized Area:	150,000 d/m on surface with dose rates to 25 mr/hr
Report #:	ECU-87-28	Date Issued: 8/87
Action Required:	Clean the surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Decontamination is in progress. Estimated completion date is 9/30/89	

Site/Condition:	216-Z-10 Crib:	10,000 to 250,000 d/m on surface, rabbit feces and tumbleweed fragments
Report #:	EP-87-33	Date Issued: 8/87
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Decontamination is in progress. Estimated completion date is 9-30-89	

TABLE 5.4

STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS

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	

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	

Site/Condition:	UN-216-W-26:	5000 d/m to 60K 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	

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

Site/Condition:	216-B-7A & B Cribs:	50,000 d/m on surface
Report #:	EP-87-45	Date Issued: 11/87
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Estimated completion date of 9/30/92	

Site/Condition:	216-B-9 Crib and tile field:	30,000 d/m on surface
Report #:	EP-87-46	Date Issued: 11/87
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Estimated completion date of 9/30/92	

Site/Condition:	216-B-43 through 50 Cribs:	3000 to 60,000 d/m on surface
Report #:	EP-87-47	Date Issued: 11/87
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Estimated completion date of 9/30/92	

Site/Condition:	UN-216-E-37:	Activity greater than 1,000,000 d/m on surface with dose rates up to 25 mR/hr
Report #:	EP-87-50	Date Issued: 12/87
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Decontamination is in progress. Estimated completion date is 9/30/89	

TABLE 5.4

STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS

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	

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	

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	

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

Site/Condition:	216-U- 1&2 Cribs:	2,500 to 8,000 d/m on surfaces of outside perimeter
Report #:	EP-88-15	Date Issued: 9/88
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Engineering study to be complete by 9/30/89	

Site/Condition:	216-U-10 Pond:	Contamination to 10,000 d/m on surface
Report #:	8810EP200-008	Date Issued: 10/88
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Engineering study to be complete by 9/30/89	

Site/Condition:	216-U-11 Overflow:	Contamination to 10,000 d/m on surface
Report #:	8810EP200-009	Date Issued: 10/88
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Estimated completion date 9/30/89. Awaiting verification to remove this from Open Status	

Site/Condition:	UN-216-W-33:	Contamination from 5,000 to 25,000 d/m
Report #:	8810EP200-012	Date Issued: 10/88
Action Required:	Clean surface	
Actionee:	Manager, Tank Farm Operations	
Current Status:	Clean-up in progress. Estimated completion date is 9/30/89	

TABLE 5.4

STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS

Site/Condition:	216-B-11A & B Reverse Wells	Spotty contamination from 10,000 to 25,000 d/m on site perimeter
Report #:	8810EP200-025	Date Issued: 11/88
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Necessary corrective actions are being investigated.	

Site/Condition:	216-B-64 Retention Basin:	Spotty contamination from 3000 to 15,000 d/m on surface
Report #:	8810EP200-026	Date Issued: 11/88
Action Required:	Clean surface	
Actionee:	Manager, B-Plant Operations	
Current Status:	This area has been treated with herbicides to prevent growth of contaminated vegetation.	

Site/Condition:	216-T-18 Crib	Spotty contamination from 2000 to 10,000 d/m on surface from termite emergence
Report #:	8810EP200-027	Date Issued: 10/88
Action Required:	Clean surface	
Actionee:	Manager, Decontamination and Decommissioning	
Current Status:	Feasibility investigations to be done in FY 1989	

TABLE 5.4

STATUS OF OPEN SURVEILLANCE AND COMPLIANCE INSPECTION REPORTS

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.

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

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

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	
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.	
Site/Condition:	241-B Farm Perimeter	Contamination up to 22mR/hr on East, South and West perimeters
Report #:	8909EP200-036	Date Issued: 9/89
Action Required:	Clean surfaces	
Actionee:	Manager, Tank Farm Surveillance	
Current Status:	Awaiting response	
Site/Condition:	244-A Lift Station	Contamination up to 3 mR/hr detected outside Surface Contamination zone
Report #:	8909EP200-037	Date Issued: 9/89
Action Required:	Clean surface	
Actionee:	Manager, Tank Farm Surveillance	
Current Status:	Awaiting response	

6.0 SUMMARY

Twenty-three sites were surveyed in August 1989 (Table 5.1).

Three SCIR's were issued (Table 5.2).

Three SCIR's were closed (Table 5.3).

Forty-eight 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