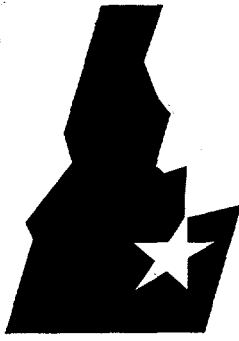


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**Idaho
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**Idaho National
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Radiological Control
Performance Indicator Report**

Third Quarter - Calendar Year 1996

Date Published
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**Idaho National Engineering Laboratory
Radiological Control Performance Indicator Report**

**Third Quarter
Calendar Year 1996**

Published November 1996

**Idaho National Engineering Laboratory
Radiological Control
Lockheed Martin Idaho Technologies Company
Idaho Falls, Idaho 83415**

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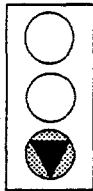
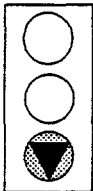
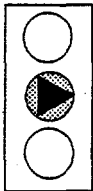
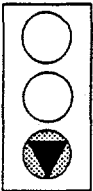
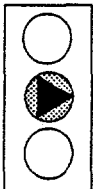
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

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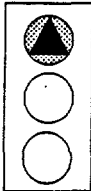
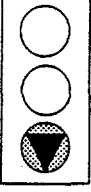
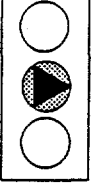
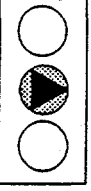
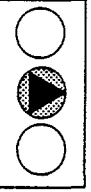
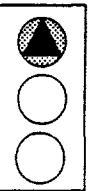
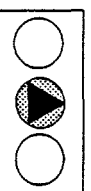
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INEL Radiological Control Performance Indicator Overview
Third Quarter 1996

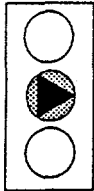
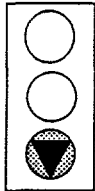
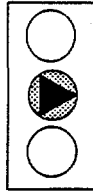
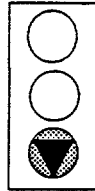
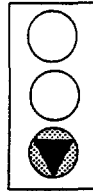
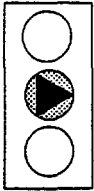
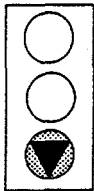
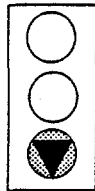
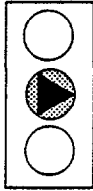
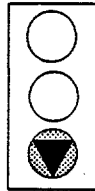
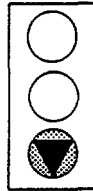
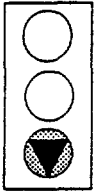
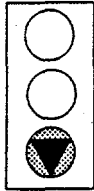
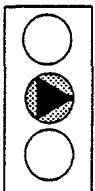
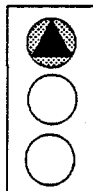
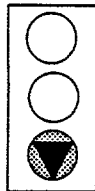
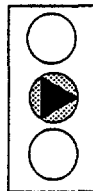
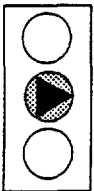
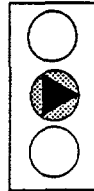
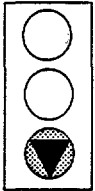
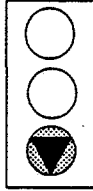

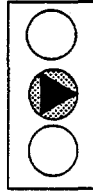
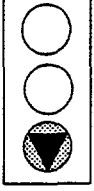
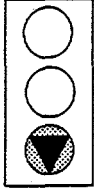
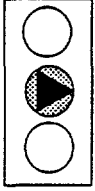
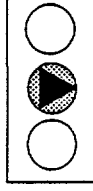
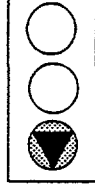

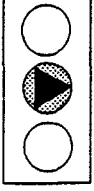
		<u>Actual</u>	<u>Goal or Average</u>
Collective Year-to-Date Penetrating Radiation Dose		114.4 person-rem	169 person-rem (Goal)
Year-to-Date Average Worker Dose		0.103 rem	0.179 rem (3 Year Average)
Maximum Year-to-Date Penetrating Dose to a Worker		1.343 rem	1.500 rem (Goal)
Maximum Year-to-Date Neutron Dose to a Worker		0.089 rem	0.125 rem (3 Year Average)
Year-to-Date Skin Contaminations		18	26 (3 Year Average)

Legend




Needs Attention	
OK	
Good	

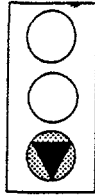
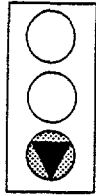
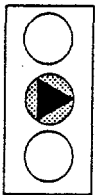
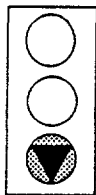
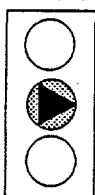
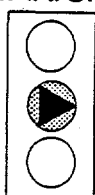
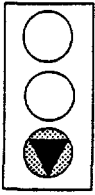
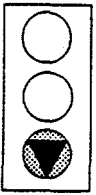
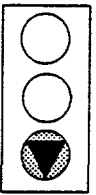
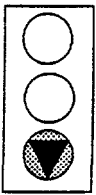
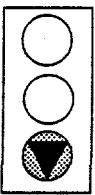
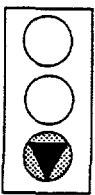
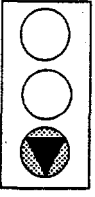
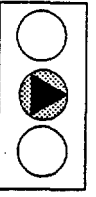
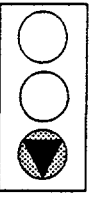
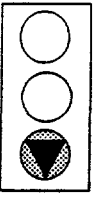
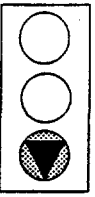
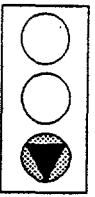
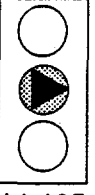
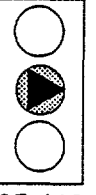
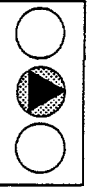
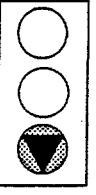
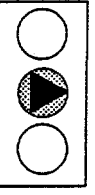
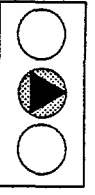
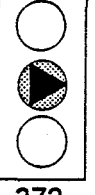
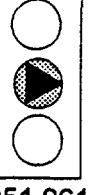
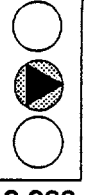
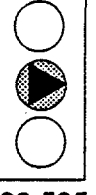
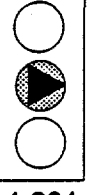
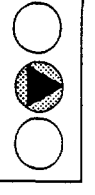
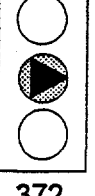
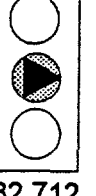
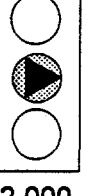
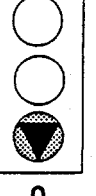
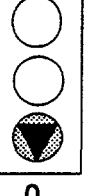
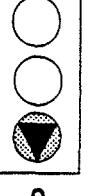
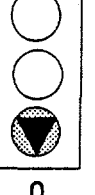
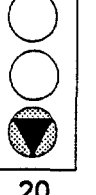
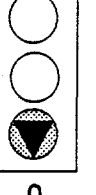
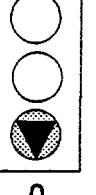
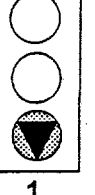
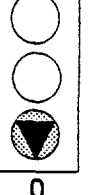
		<u>Actual</u>	<u>Goal or Average</u>
Year-to-Date Clothing Contaminations		48	70 (3 Year Average)
Year-to-Date Airborne Events		0	2 (3 Year Average)
Year-to-Date Radioactive Material Intakes		6	11 (3 Year Average)
Contamination Area		193,367 ft ²	203,700 ft ² (3 Year Average)
High Contamination Area		297,663 ft ²	301,475 ft ² (3 Year Average)
Airborne Radioactivity Area		85,084 ft ²	81,633 ft ² (3 Year Average)
Year-To-Date Spills		21	150 (3 Year Average)

INEL Facility Radiological Control Performance Indicator Overview Third Quarter 1996

	CFA	ICPP	PBF	RWMC	TRA	TAN/SMC
Collective Year-to-Date Penetrating Radiation Dose (person-rem)	 2.331	 84.433	 0.728	 4.234	 13.822	 6.284
Year-to-Date Average Worker Dose (rem)	 0.010	 0.142	 0.020	 0.030	 0.054	 0.044
Maximum Year-to-Date Penetrating Dose to a Worker (rem)	 0.089	 1.343	 0.135	 0.170	 0.450	 0.559
Maximum Year-to-Date Neutron Dose to a Worker (rem)	 0.073	 0.038	 0.000	 0.089	 0.080	 0.000
Year-to-Date Skin Contaminations	 0	 12	 1	 0	 2	 3

Legend

Needs Attention	
OK	
Good	

	CFA	ICPP	PBF	RWMC	TRA	TAN/SMC
Year-to-Date Clothing Contaminations	 0	 31	 2	 0	 13	 2
Year-to-Date Airborne Events	 0	 0	 0	 0	 0	 0
Year-to-Date Radioactive Material Intakes	 0	 6	 0	 0	 0	 0
Contamination Area - ft ²	 14,105	 65,419	 7,378	 0	 52,516	 53,949
High Contamination Area - ft ²	 372	 251,961	 2,288	 29,525	 1,991	 11,526
Airborne Radioactivity Area - ft ²	 372	 82,712	 2,000	 0	 0	 0
Year-to-Date Spills	 0	 20	 0	 0	 1	 0

Executive Summary

Radiological Control Performance Indicator Report

Third Quarter 1996

This document provides a report and analysis of the Radiological Control Program through the third quarter of calendar year 1996 (CY-1996) at the Idaho National Engineering Laboratory (INEL) under the direction of Lockheed Martin Idaho Technologies Company (LMITCO). The Radiological Control Performance Indicator Report is provided in accordance with Article 133 of the INEL Radiological Control Manual.

- Total INEL penetrating radiation exposure through the end of the third quarter was 114.378 person-rem (p-rem).
- Average penetrating radiation dose to an INEL radiation worker through the end of the third quarter was 0.103 rem.
- Maximum penetrating radiation dose to an INEL worker through the third quarter was 1.343 rem.
- Maximum neutron radiation dose to an INEL worker through the end of the third quarter was 0.089 rem.
- The total number of INEL skin contaminations through the third quarter was eighteen, sixteen of which resulted in Occurrence Reports (OR).
- The total number of INEL clothing contaminations through the end of the third quarter was forty-eight, of which twenty-five resulted in ORs.
- Total number of airborne radioactivity events exceeding 1 Derived Air Concentration (DAC) through the end of the third quarter was zero.
- Total number of year-to-date radioactive material intakes assigned a dose of 10 mrem or more was six. Five intakes met LMITCO Conduct of Operations reportable criteria.
- Total INEL Contamination Area was 193,367 square feet. Total High Contamination Area was 297,663 square feet, and total Airborne Radioactivity Area was 85,084 square feet.
- The total number of radioactive spills was twenty-one, of which four resulted in Occurrence Reports.

Radiological Control Performance Indicator Charter

The INEL Radiological Control Performance Indicator Report is provided quarterly, in accordance with Article 133 of the INEL Radiological Control Manual. Indicators are used as a measure of performance of the Radiological Control Program and as a motivation for improvement, not as a goal in themselves. These indicators should be used by management to assist in focusing priorities and attention and adherence to As-Low-As-Reasonably-Achievable (ALARA) practices.

The ALARA Committees establish ALARA goals for the INEL based on forecasts and goals provided by each facility organizational manager or supervisor.

Performance goals are realistic and measurable. Stringent goals are set at least annually to reflect expected workloads and improvement of radiological performance. Goals higher than previous goals may occasionally be set due to changes in work scope or mission.

The INEL Radiological Control Performance Indicators consist of:

- Collective dose in person-rem.
- Average worker dose, maximum dose to a worker, and maximum neutron dose equivalent to a worker.
- Number of skin and clothing contaminations, including the number of contaminated wounds and facial contaminations.
- Number of radioactive material intakes resulting in a dose assessment of 10 mrem or more.
- Area of Contamination, High Contamination, and Airborne Radioactivity Areas, in square feet.
- Airborne radioactivity events and spills.

These indicators also provide tracking and trending for the previous three years (where information is available).

Other Radiological Control indicators suggested in the Radiological Control Manual are tracked and trended in other reports.

- The volume and radioactivity content of radioactive waste are reported by the Shipping and Material Management Department, found in the INEL Quarterly Waste Reduction Report and on the Radioactive Waste Management Information System (RWMIS).
- Releases of liquid and airborne radioactivity discharges are reported by the Environmental Protection Department in the INEL Environmental Monitoring Report and the INEL National Emission Standard for Hazardous Pollutants - Radionuclide Annual Report.

Radiological Control Performance Indicator Report Criteria

The INEL Radiological Control Performance Indicator Report is comprised of a description of the indicator and the criteria used for measurement.

Collective Radiation Dose -

The INEL collective total penetrating radiation exposure received and the associated quarterly and annual ALARA goals.

Average Worker Radiation Dose -

The average penetrating radiation dose based on collective dose and the total number of personnel receiving measured radiation exposure.

Maximum Radiation Dose to a Worker -

The highest penetrating radiation dose received by a worker at the INEL.

Maximum Neutron Dose to a Worker -

This indicator reports the highest neutron radiation dose equivalent received by a worker.

Number of Skin Contaminations -

The total number of radioactive skin contaminations and the number of those contaminations resulting in an Occurrence Report, the number of facial contaminations, and the number of contaminated wounds.

Number of Clothing Contaminations -

The total number of radioactive clothing contaminations and the number of those contaminations resulting in an Occurrence Report.

Airborne Events -

The number of occupied facility areas not posted as Airborne Radioactivity Areas that exceed 10% Derived Air Concentrations (DAC).

Total Year-to-Date Intakes -

The number of positive bioassay results that indicate an intake of radioactive material and result in a dose assessment of 10 mrem or more from an INEL occupational exposure. The total number of positive bioassays that resulted in an Occurrence Report are also tracked and trended.

Contamination Area -

The total area in square feet that falls within the description of a Contamination Area as defined in Table 2-3 of the INEL Radiological Control Manual.

High Contamination Area -

The total area in square feet that falls within the description of a High Contamination Area as defined in Table 2-3 of the INEL Radiological Control Manual.

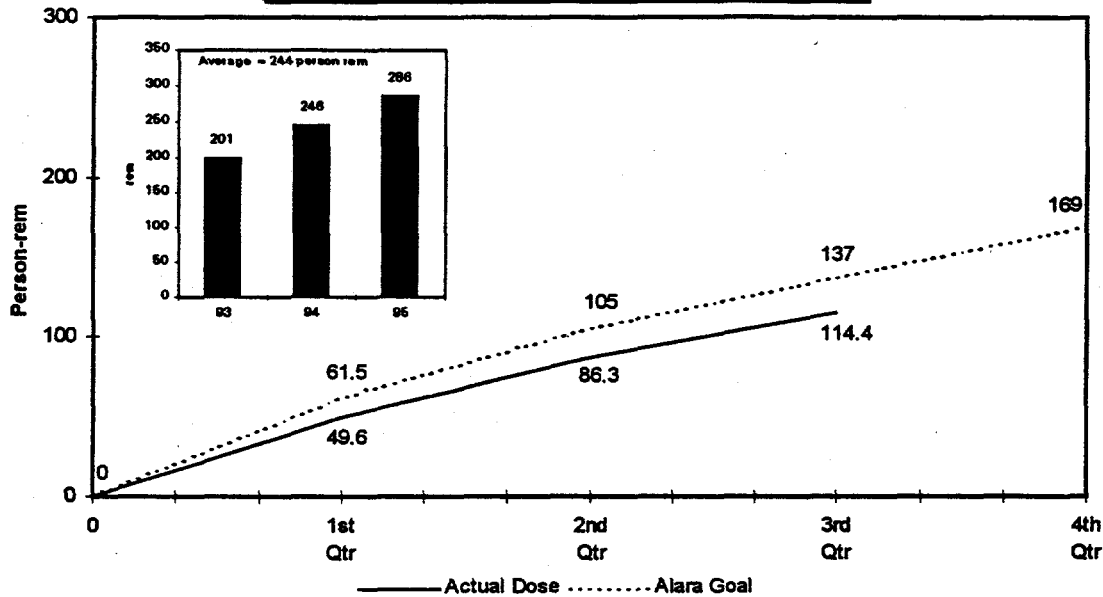
Airborne Radioactivity Area -

The total area in square feet that falls within the description of an Airborne Radioactivity Area as defined in Table 2-3 of the INEL Radiological Control Manual.

Radioactive Spills -

The total number of radioactive spills at the INEL. A spill is considered an inadvertent loss or release of radioactive contamination outside a Radiologically Controlled Area.

**INEL CY-96 Year to Date
Collective Penetrating Radiation Dose**



DOE and LIMITCO policy is to maintain occupational radiation exposure ALARA. Measuring collective radiation exposure provides an indication of the effectiveness of the Radiological Control and ALARA Programs.

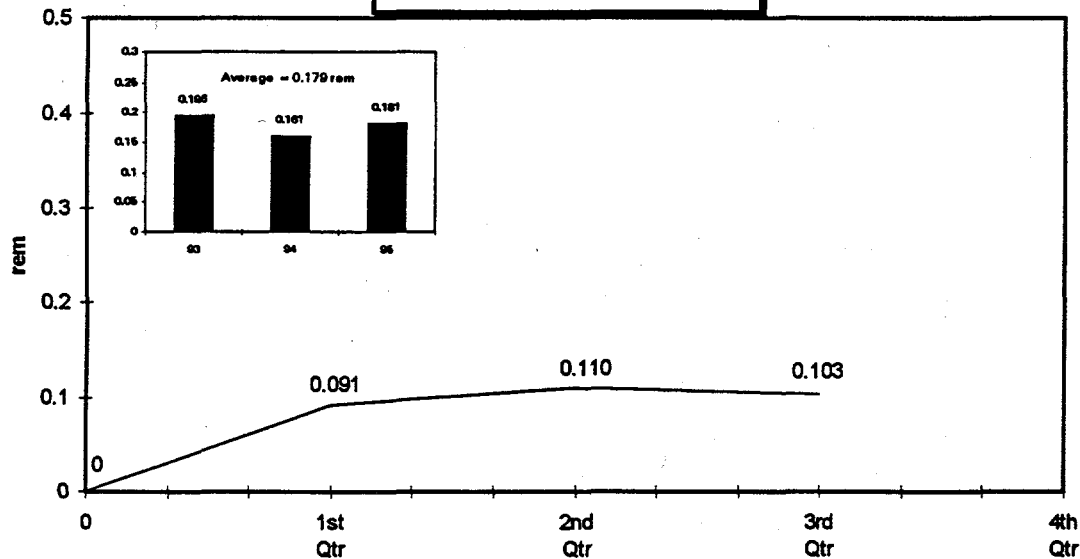
The ALARA goal for the INEL was adjusted during the second quarter from 236.4 to 174 person rem and during the third quarter to 169 rem to reflect dose reduction from use of ALARA protective measures and changes in work scope. Evaluations and adjustment to the yearly and quarterly goals are periodically performed to provide realistic values.

The INEL Performance Indicators continue to reflect a challenging, yet positive control of occupational radiation exposure.

The collective radiation exposure through the end of the third quarter was 114.378 person-rem. The collective exposure represents 84 % of the third quarter ALARA goal.

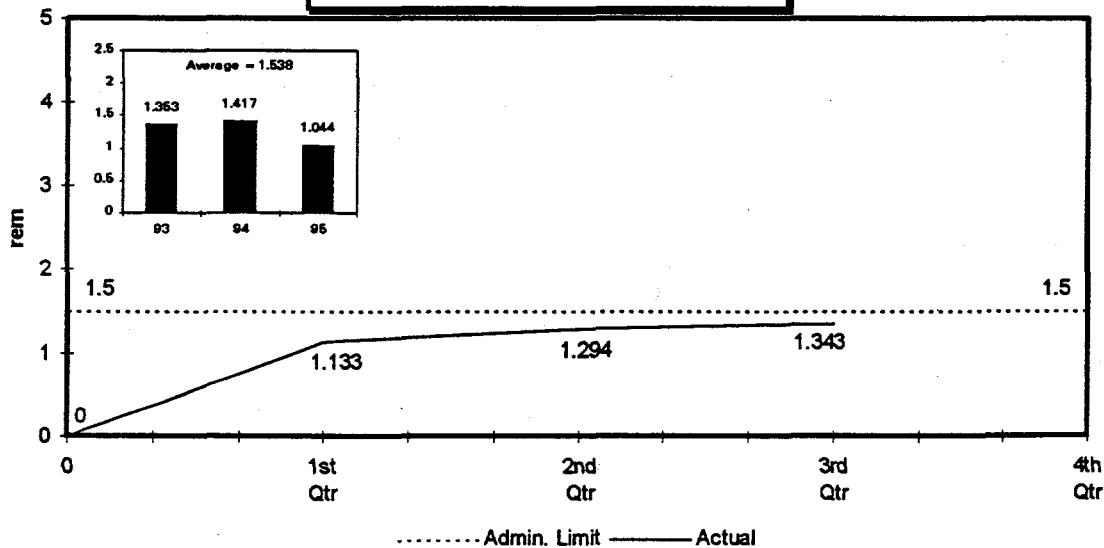
The charts on the following pages provide an indication of how well LIMITCO is performing as a company in the six specific facility areas.

INEL CY-96 Year to Date Average Worker Dose



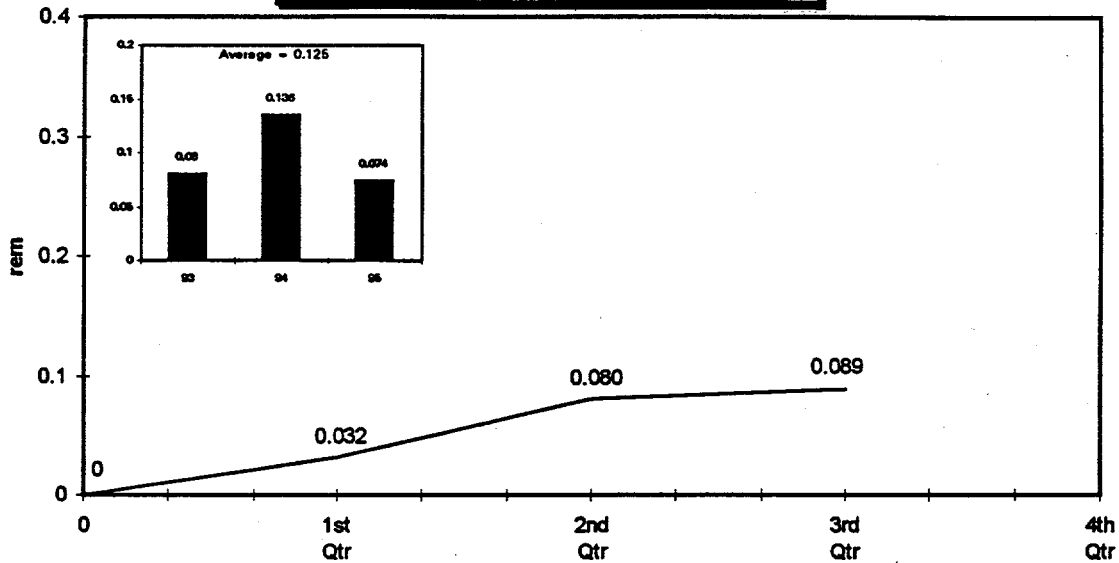
The Average Occupational radiation exposure for the INEL workers through the end of the third quarter was 0.103 rem. Reducing the average worker exposure is a positive indicator.

CY-96 Maximum Year to Date Penetrating Dose to a Worker



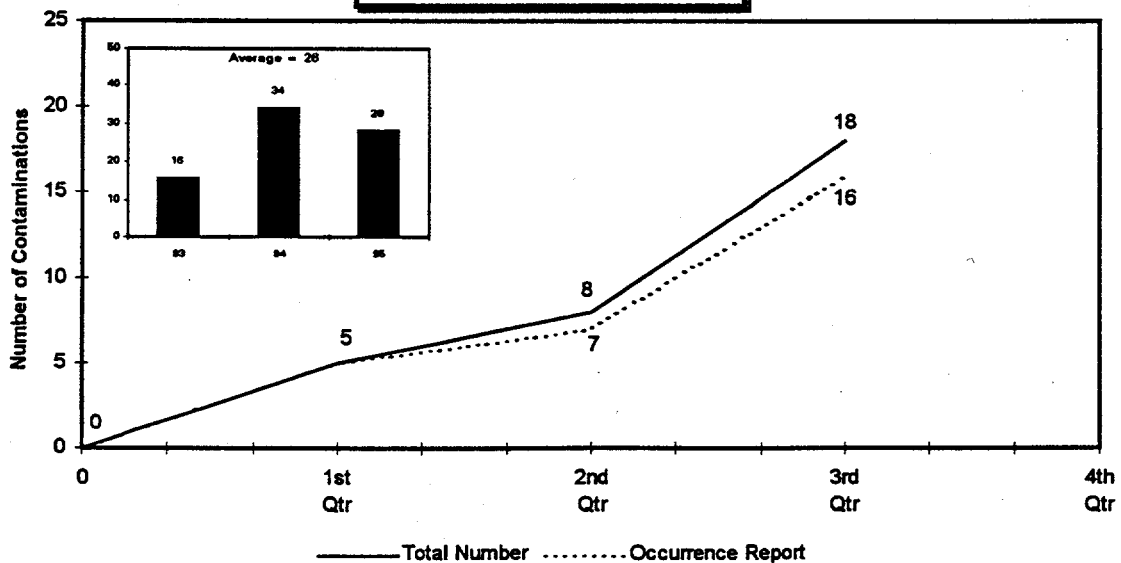
The Maximum penetrating radiation dose to a worker through the end of the third quarter was 1.343 rem. The dose resulted from activities associated with the ICPP NWCF turnaround projects.

**CY-96 INEL Maximum Year to Date
Neutron Dose to a Worker**



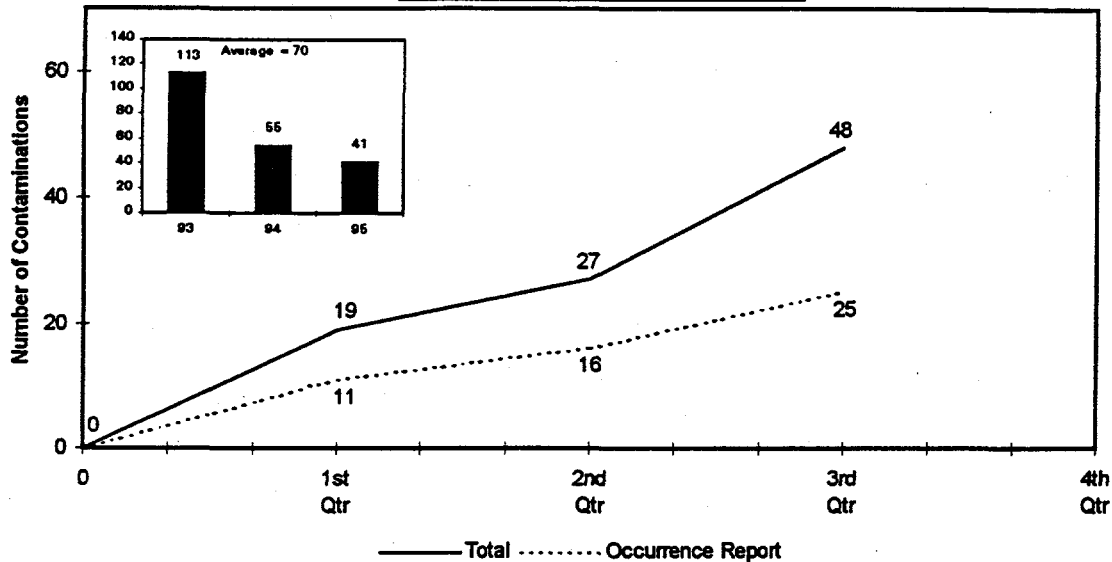
Neutron dose is included in the total penetrating radiation dose. It is shown here as a separate indicator to identify the maximum neutron dose to a worker. Through the end of the third quarter the maximum neutron dose is 0.089 rem. The second quarter number was reduced based on a re-evaluation of the numbers.

**CY-96 INEL Year to Date
Skin Contaminations**



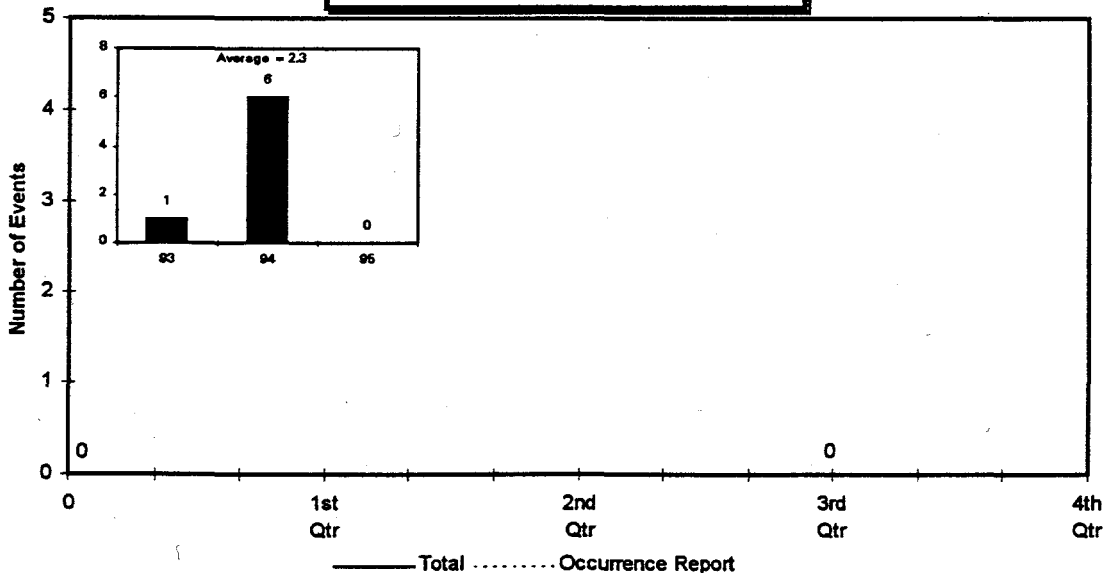
There were ten skin contaminations at the INEL during the third quarter. Nine resulted in ORs. There were seven facial contaminations and no contaminated wounds.

INEL CY-96 Year to Date Clothing Contaminations



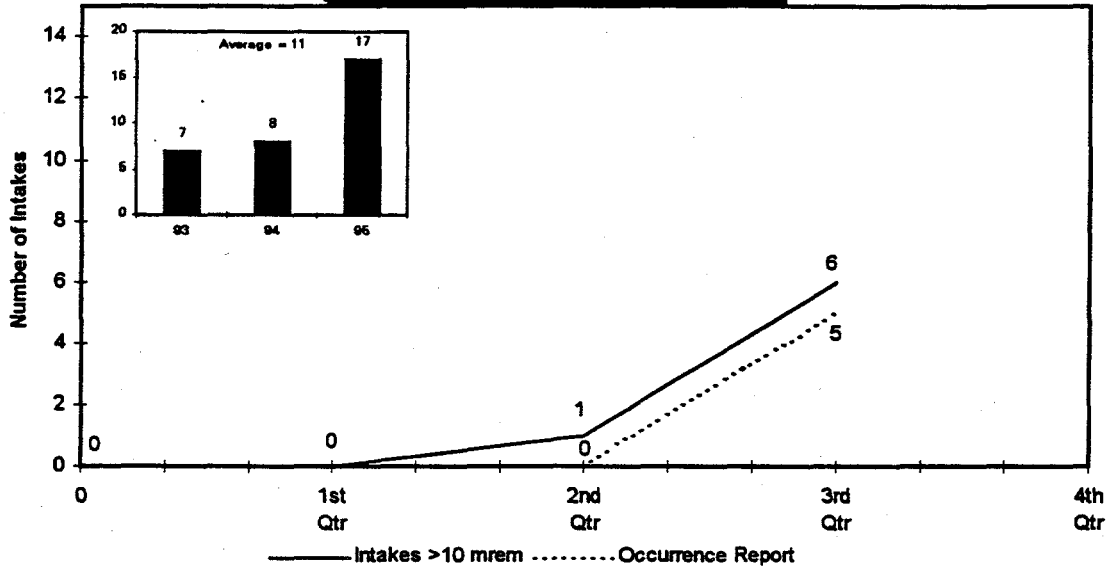
There were forty eight clothing contaminations at the INEL through the end of the third quarter. Twenty-five resulted in ORs. Nine ORs occurred during the third quarter. Seven occurred at ICPP and one at TRA.

INEL CY-96 Year to Date Airborne Radioactivity Events



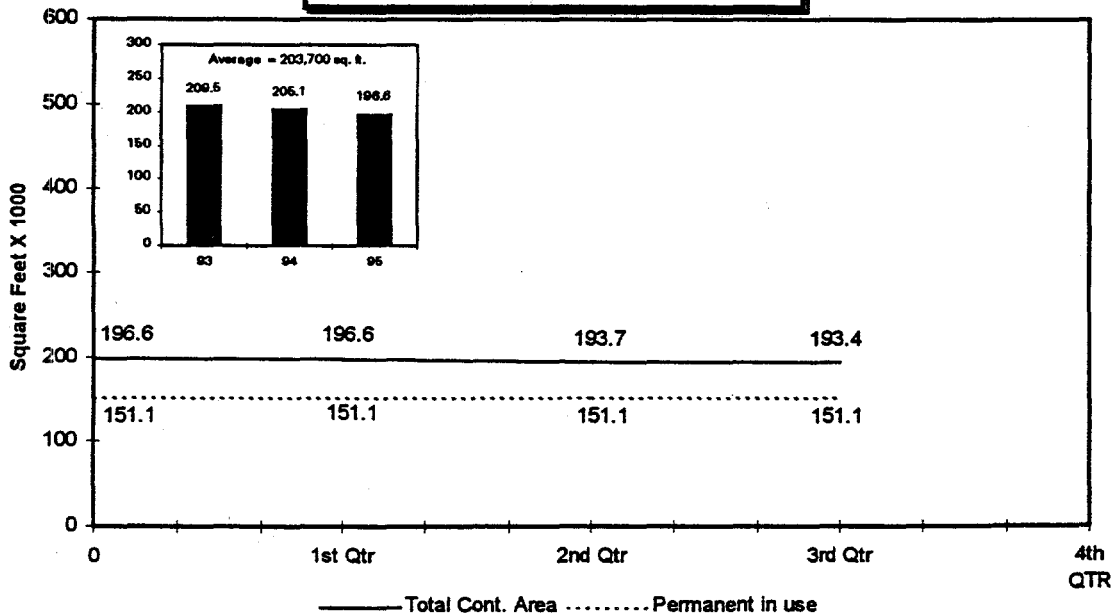
This indicator identifies the number of times airborne radioactivity exceeding 10 % of the DOE limit was detected and measured outside of posted Airborne Radioactivity Areas. There have been none identified through the third quarter.

INEL CY-96 Year to Date Radioactive Material Intakes



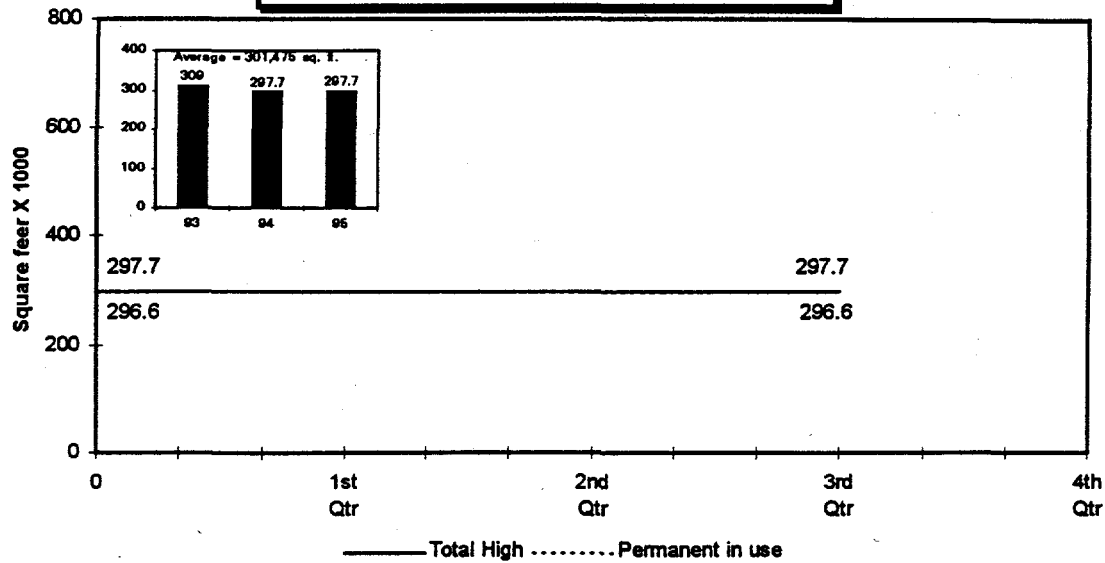
Radioactive material intakes depict the number of positive bioassays that result in a dose assessment of 10 mrem or greater. There has been six through the end of the third quarter; 5 of these met the LMITCO reporting criteria for an OR.

INEL CY-96 Contamination Area



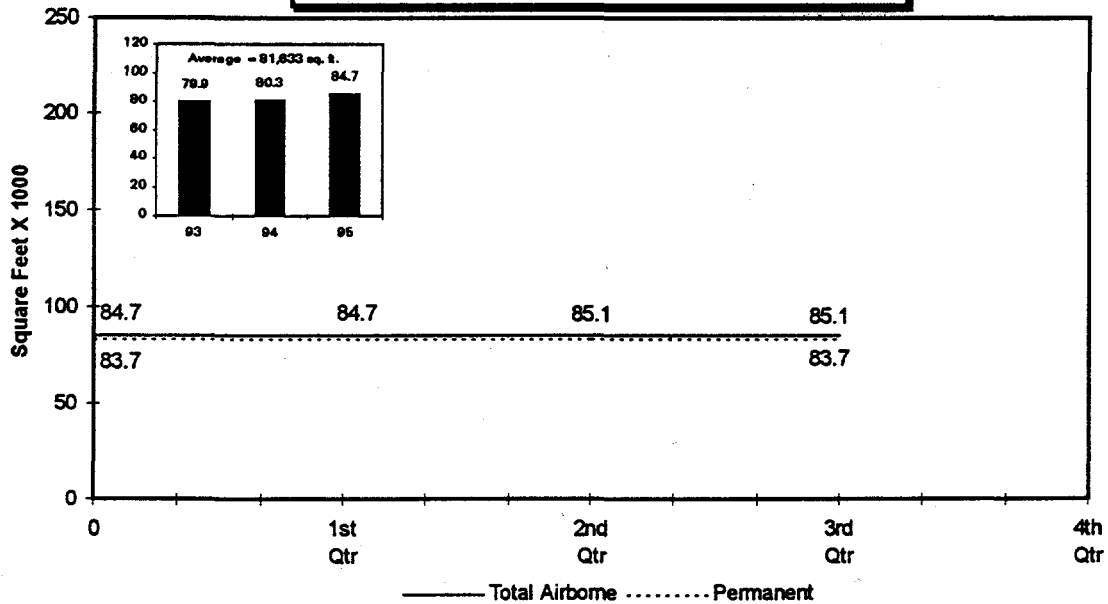
The total area designated as Contamination Area at the end of the third quarter was 193,367 square feet. 151,123 square feet is designated as permanent and in use Contamination Area.

INEL CY-96 High Contamination Area



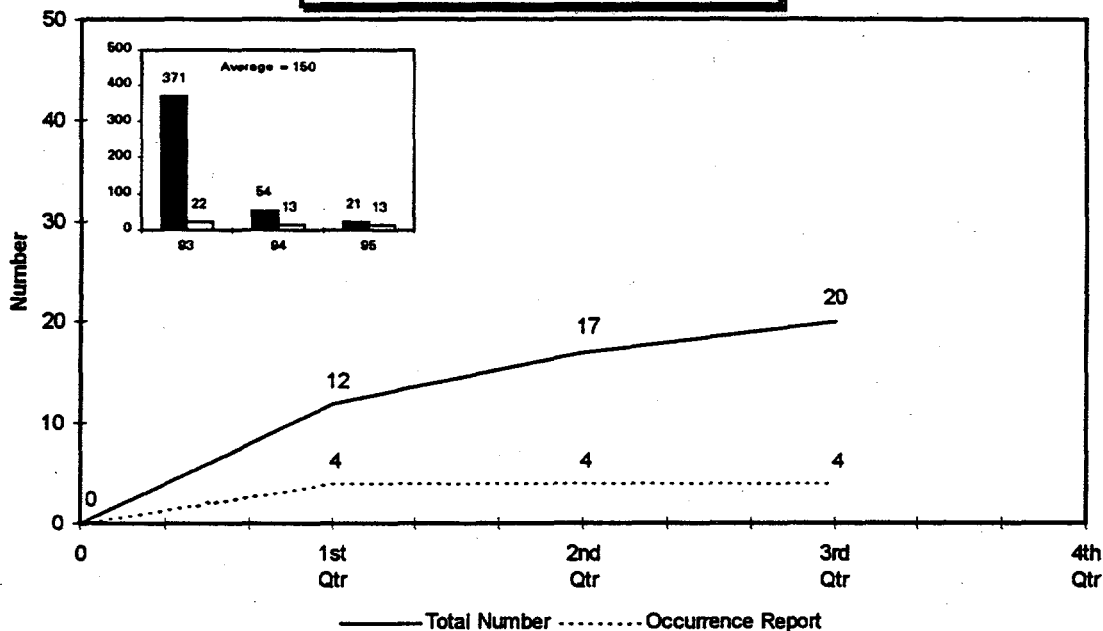
Total High Contamination Area at the end of the third quarter was 297,663 square feet. 296,641 square feet is designated as permanent and in use.

INEL CY-96 Airborne Radioactivity Area



The total Airborne Radioactivity Area at the INEL at the end of the third quarter was 85,084 square feet. 83,662 square feet is designated as permanent and in use.

INEL CY-96 Year to Date Spills



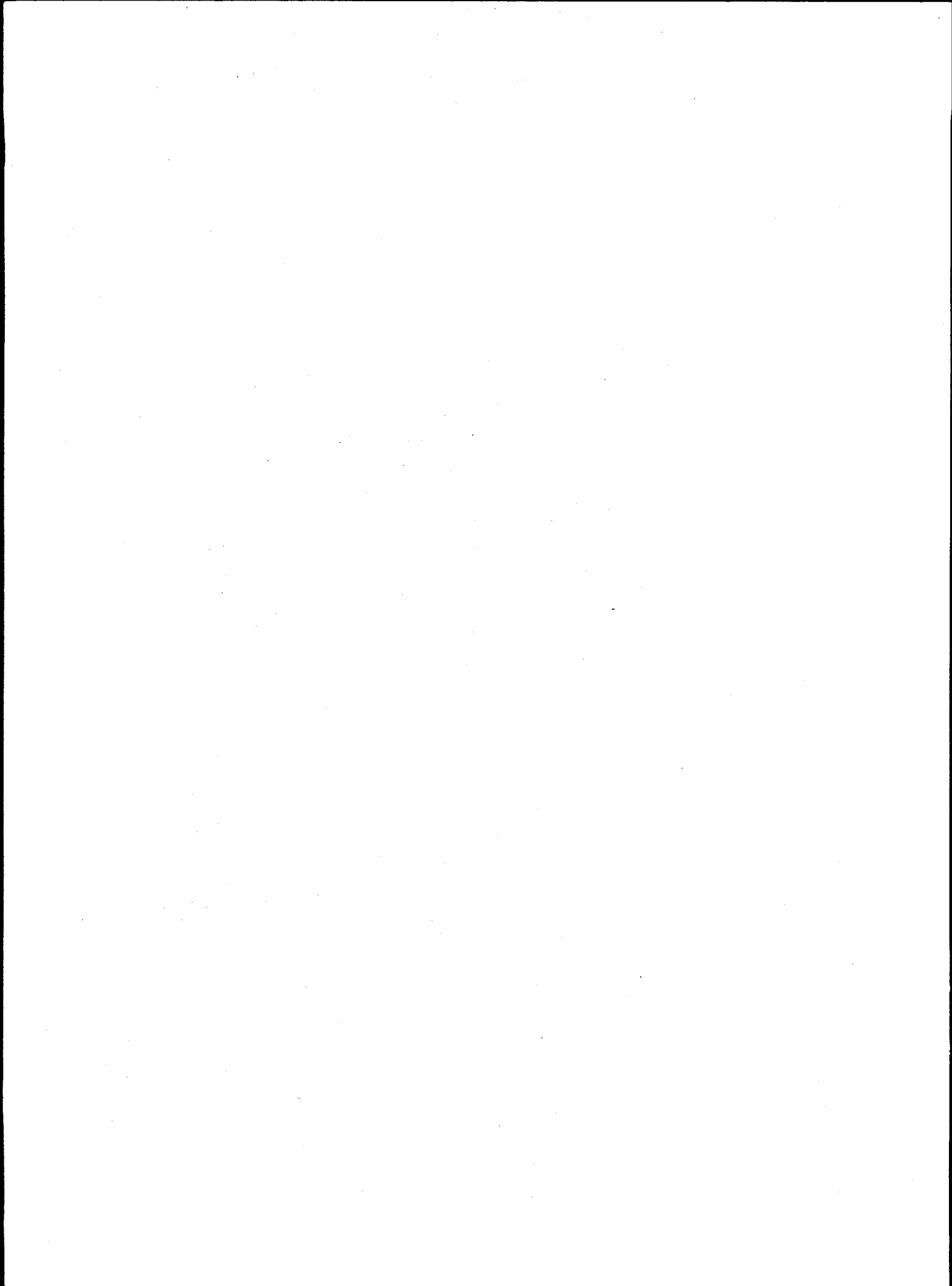
The INEL had twenty-one spills or loss of control of radioactive material through the end of the third quarter. Four of these occurred during the third quarter, three at the ICPP and one at the TRA. Only four of the total twenty-one spills resulted in ORs.

Central Facilities Area

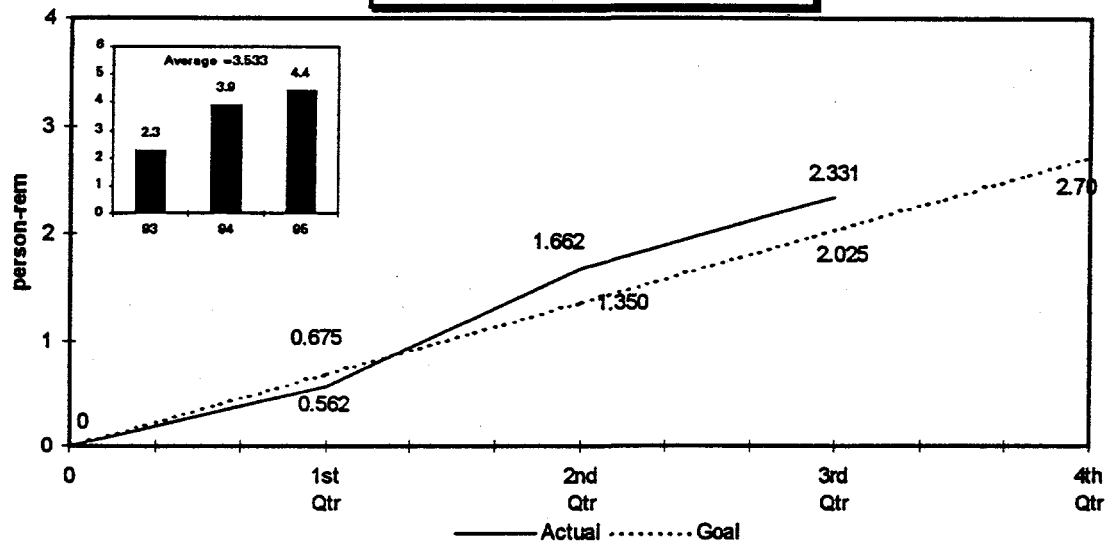
The CFA Facility report also includes
other outlying area information

Summary

The Airborne Activity Area chart shows an increase during the second quarter. The increase was due to demolition activities of Hot Cell 2 at ARA I

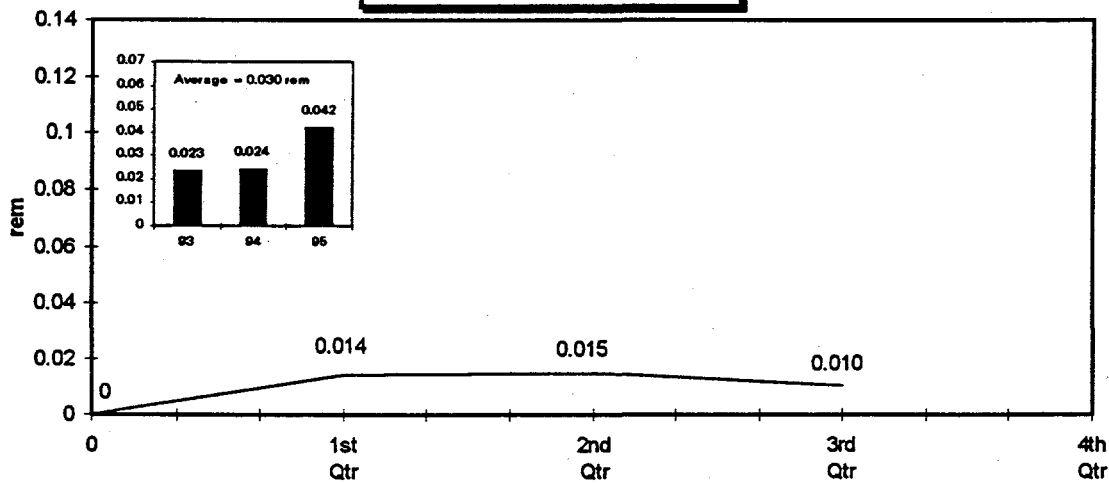


**CFA CY-96 Year to Date
Penetrating Radiation Dose**



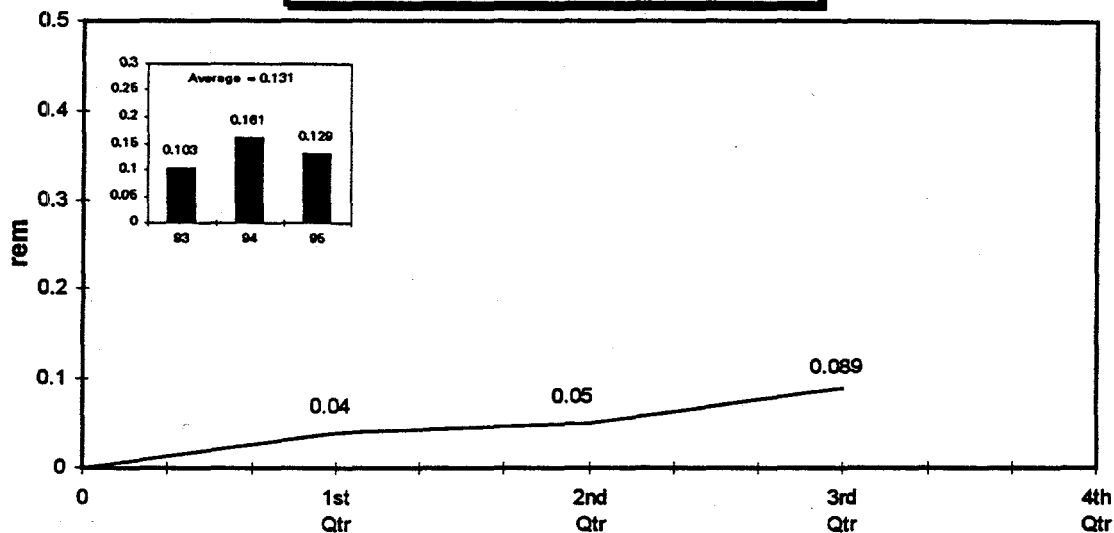
The collective penetrating occupational radiation exposure at CFA through the end of the third quarter was 2.331 person-rem. Major contributors have been Decontamination and Decommissioning (D&D), Environmental Restoration (ER), environmental monitoring, and facility maintenance.

**CFA CY-96 Year to Date
Average Worker Dose**



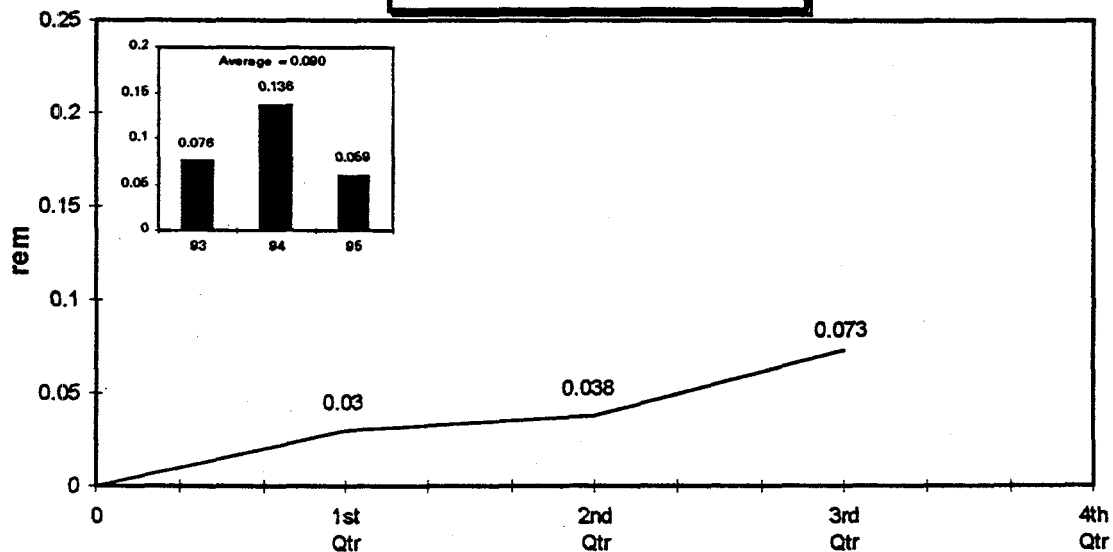
The CFA average worker dose through the end of the third quarter was 0.010 rem.

**CFA CY-96 Maximum Year to Date
Penetrating Dose to a Worker**



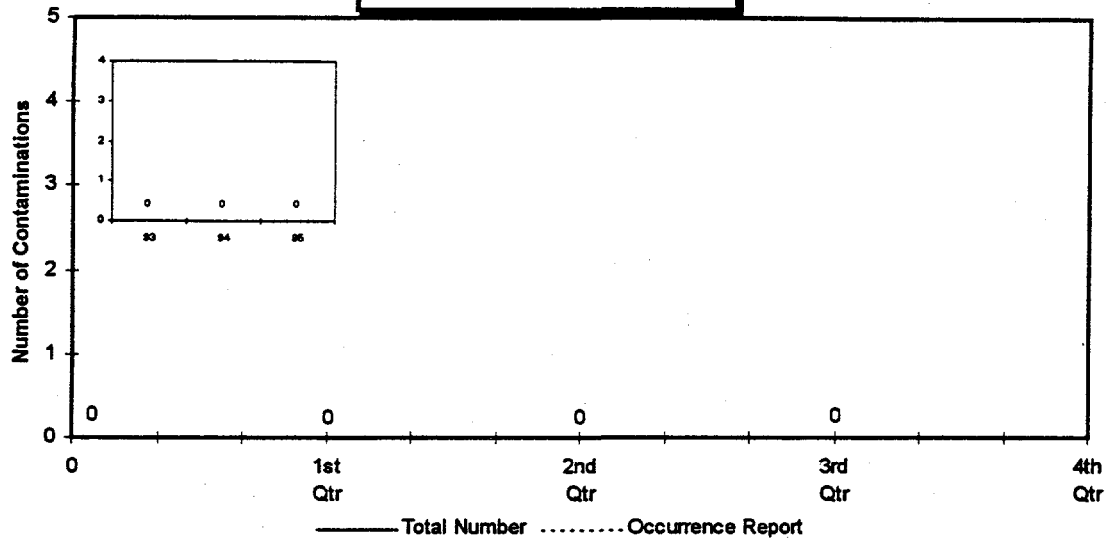
The maximum penetrating radiation dose to a CFA worker through the end of the third quarter was 0.089 rem.

**CFA CY-96 Year to Date
Neutron Dose to a Worker**



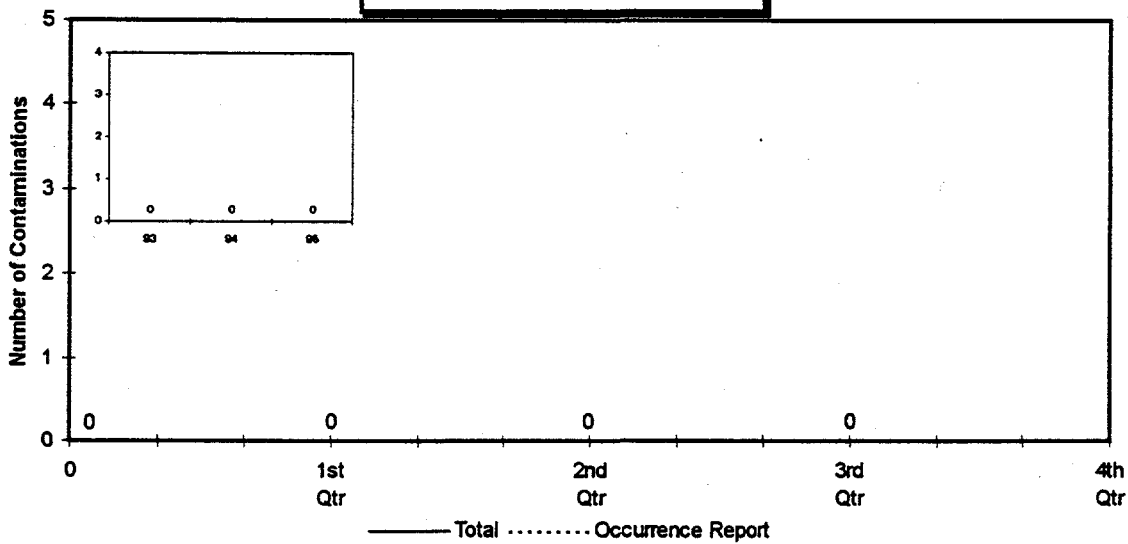
Maximum neutron dose through the end of the third quarter was 0.073 rem, primarily from calibration of neutron instrumentation at the Health Physics Instrument Laboratory.

**CFA CY-96 Year to Date
Skin Contaminations**



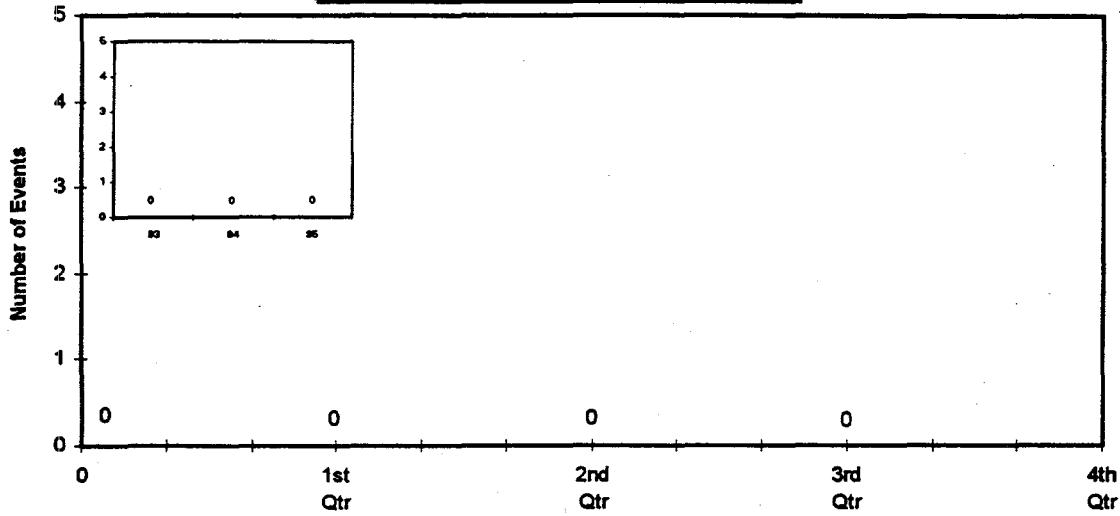
There were no skin contaminations at CFA areas during the third quarter

**CFA CY-96 Year To Date
Clothing Contaminations**



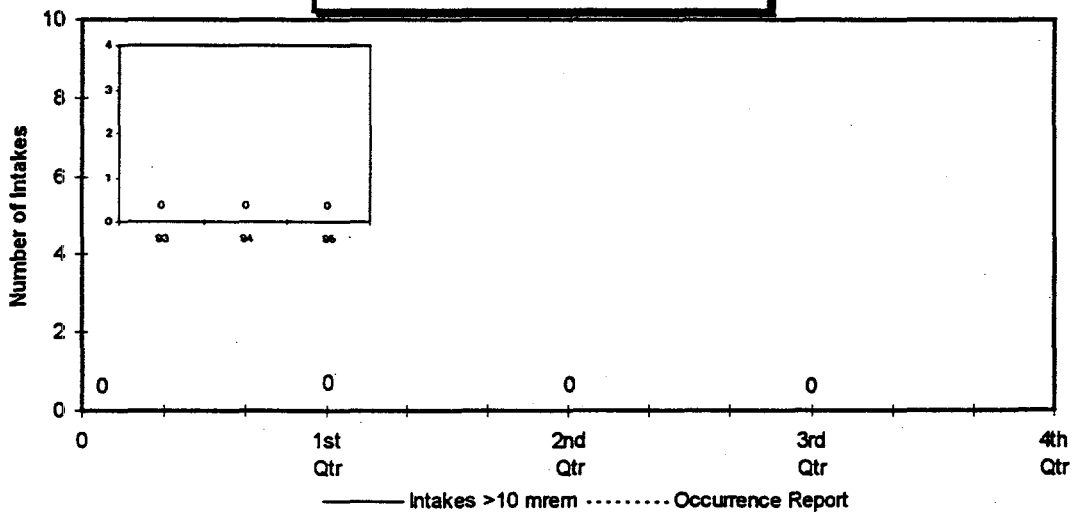
There were no clothing contaminations at CFA areas through the end of the third quarter.

**CFA CY-96 Year to Date
Airborne Radioactivity Events**



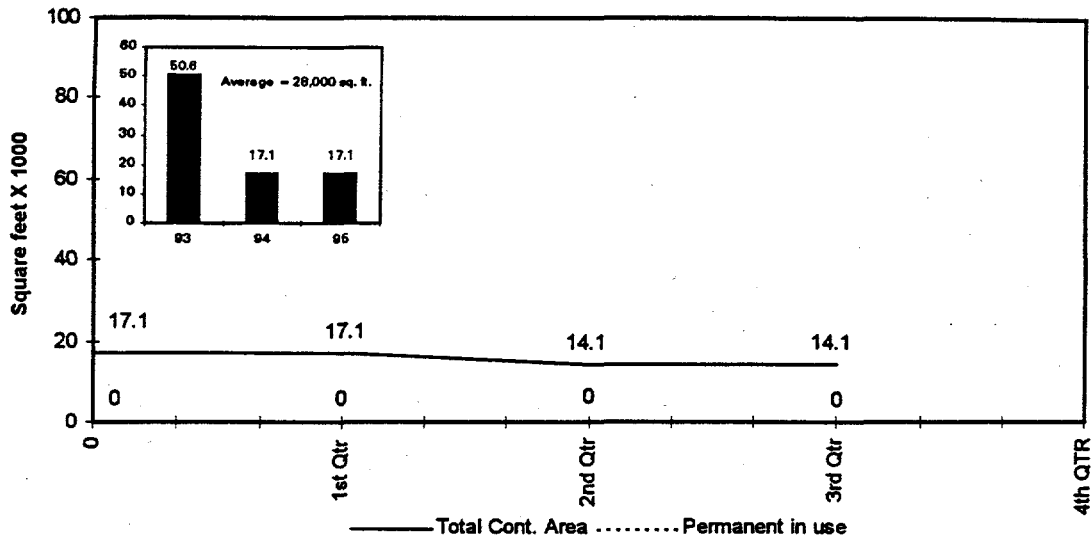
There has been no airborne activity detected that was greater than 10 % DAC at CFA areas through the end of the third quarter.

**CFA CY-96 Year to Date
Radioactive Material Intakes**



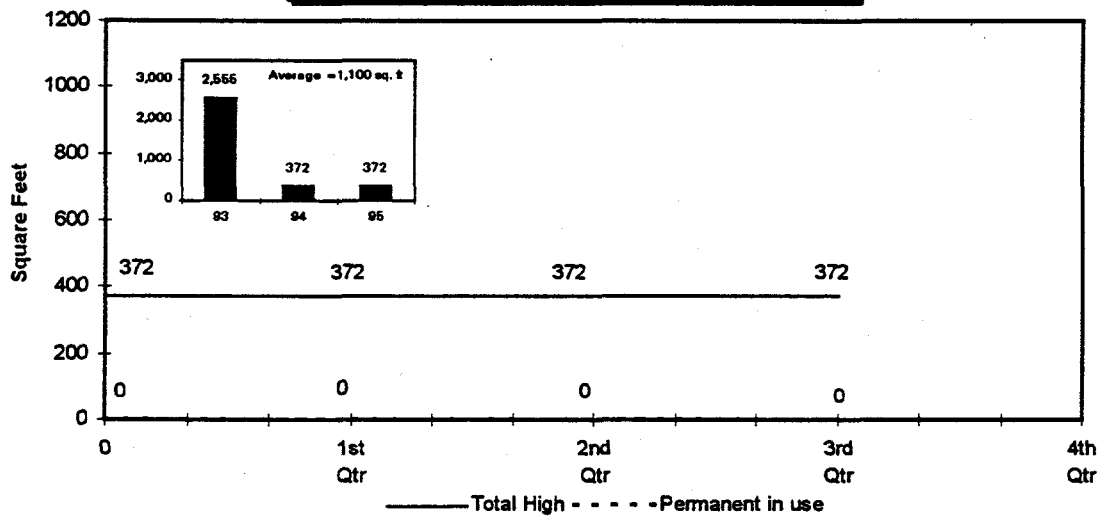
There were no positive bioassays indicating a radioactive material intake that resulted in a dose assessment of 10 mrem or greater at CFA through the end of the third quarter.

CFA CY-96 Contamination Area

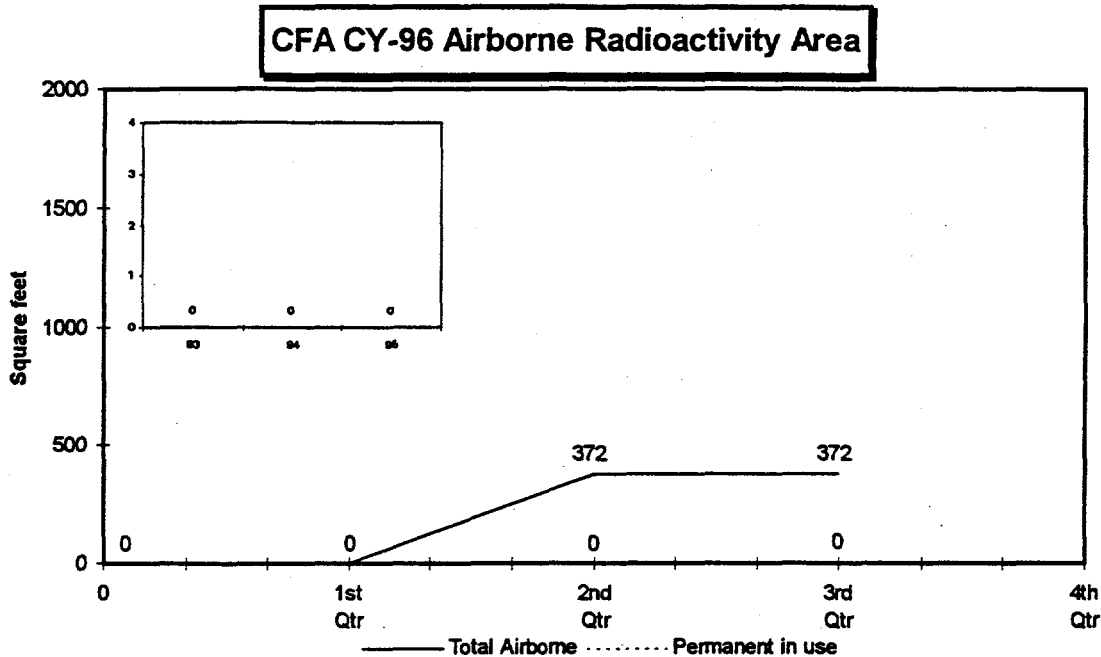


The total Contamination Area at CFA at the end of the third quarter was 14,105 square feet. None of this area was designated as permanent and in use.

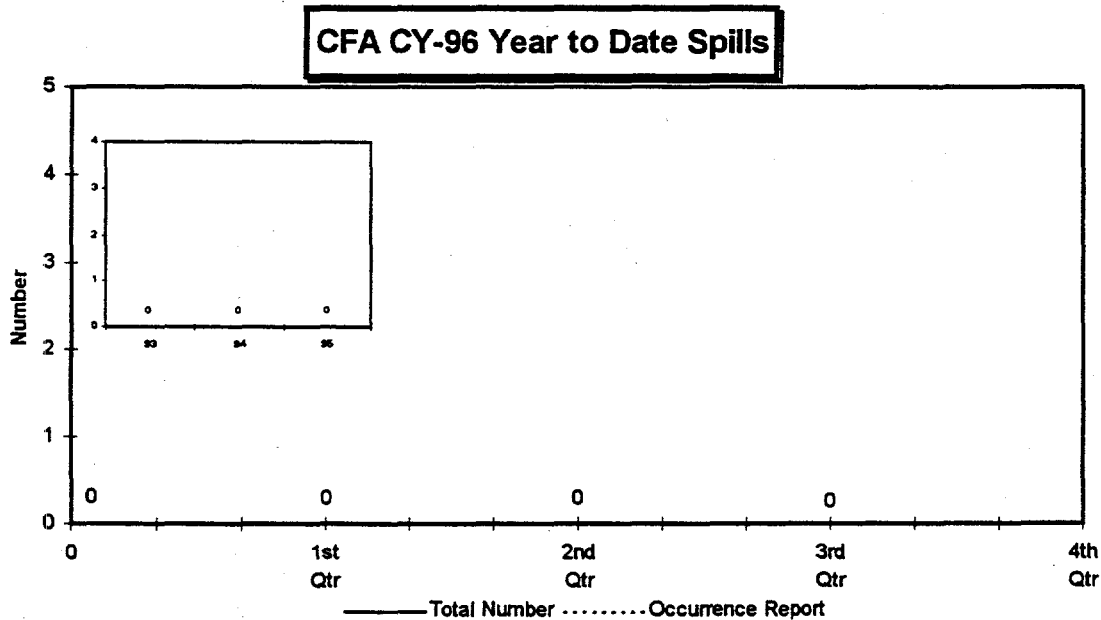
CFA CY-96 High Contamination Area



The total High Contamination Area at CFA at the end of the third quarter was 372 square feet. None of this was designated as permanent and in use.



The total Airborne Radioactivity Area at CFA at the end of the third quarter was 372 square feet. The increase was due to demolition of Hot Cell 2 at ARA I. None is designated as permanent and in use.

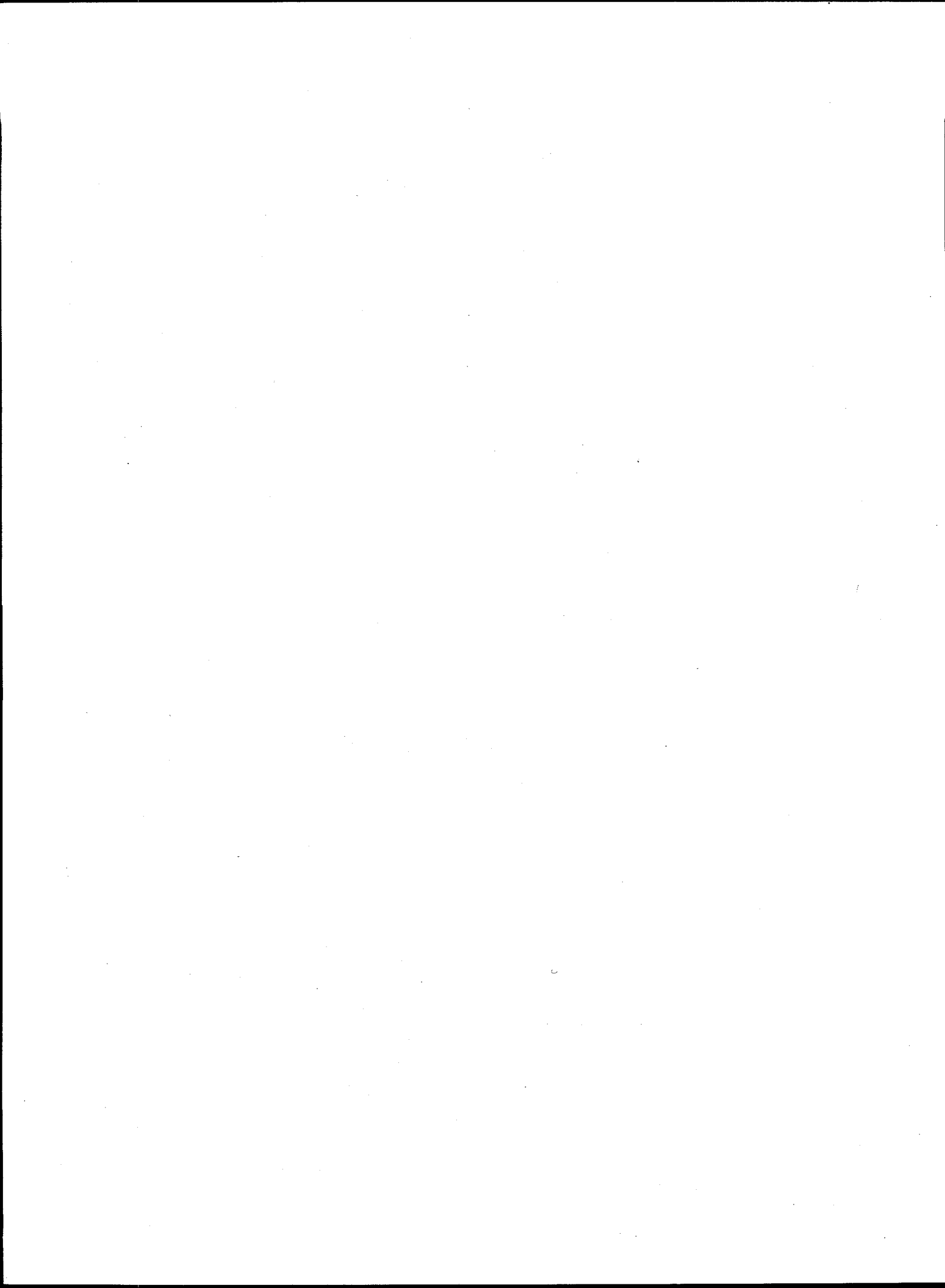


CFA had no radioactive spills or loss of control of radioactive material during the third quarter.

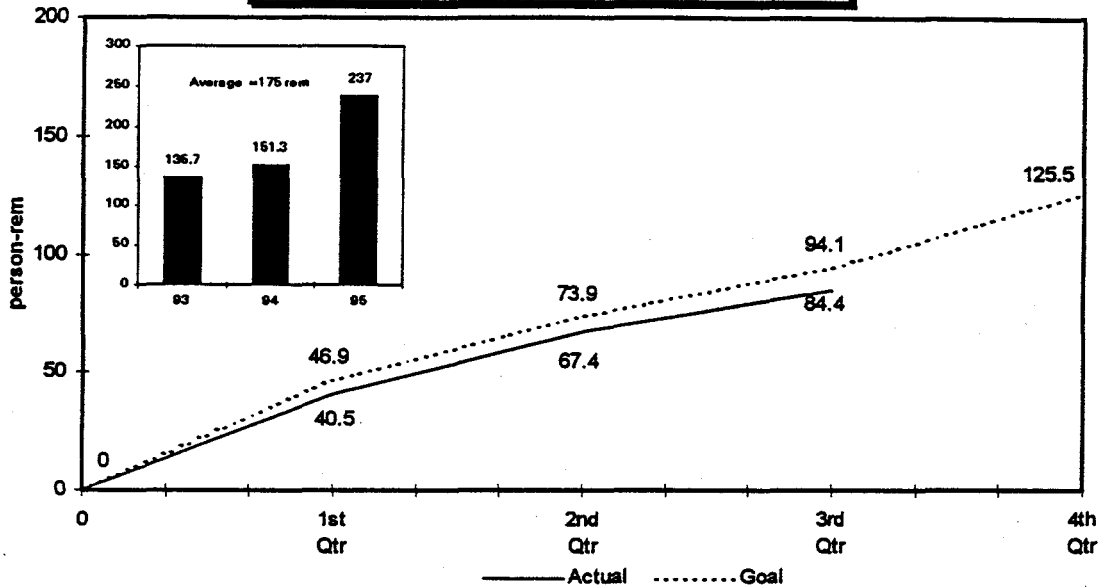
Idaho Chemical Processing Plant

SUMMARY

1. The major contributors to the third quarter occupational radiation exposure were the NWCF turnaround projects, the ROVER demolition project, and the Vessel 106 liner project.
2. Details of the clothing contaminations during the third quarter are contained in ORs ID-LITC-WASTEMNGT-1996-0009, ID-LITC-PHASEOUT-1996-0006, 1996-0007, and 1996-0008.
3. Skin contamination and radioactive material intakes occurred from one event at the ICPP. The contaminations and intakes are recorded separately.

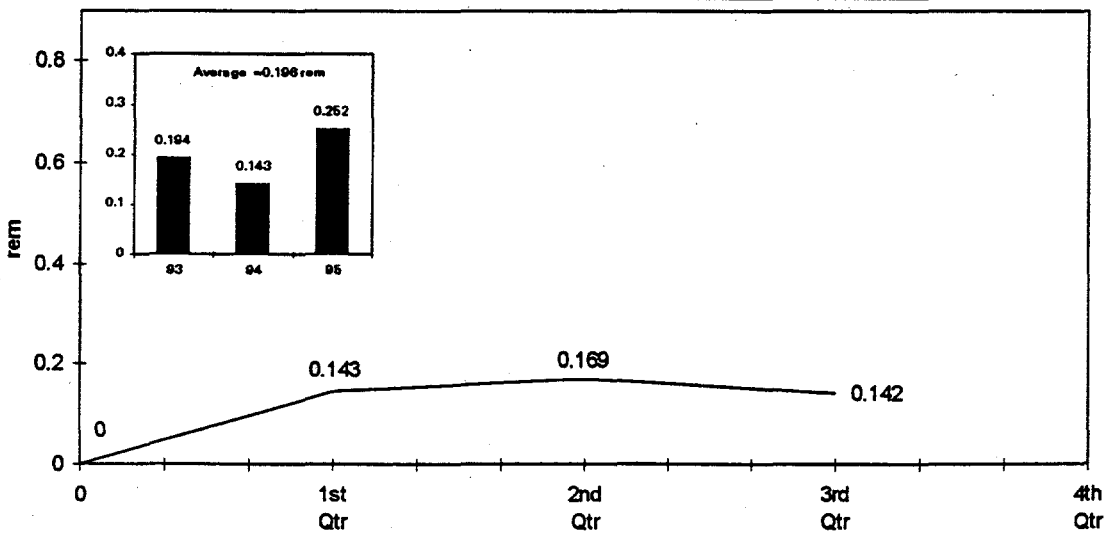


**ICPP CY-96 Year to Date
Collective Penetrating Radiation Dose**



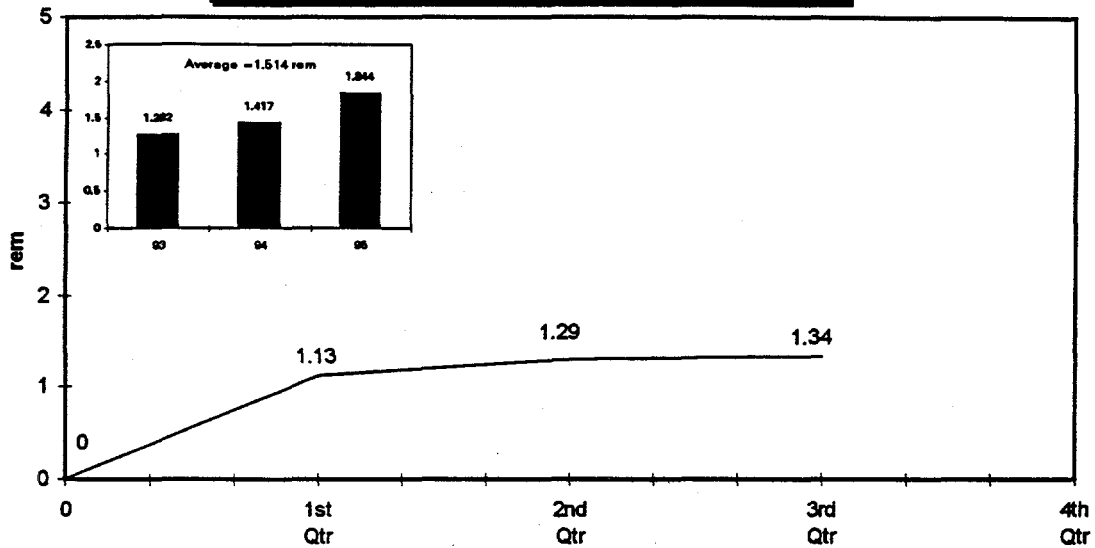
The ICPP collective penetrating occupational radiation exposure through the end of the third quarter was 84.433 person-rem.

ICPP CY-96 Year to Date Average Worker Dose



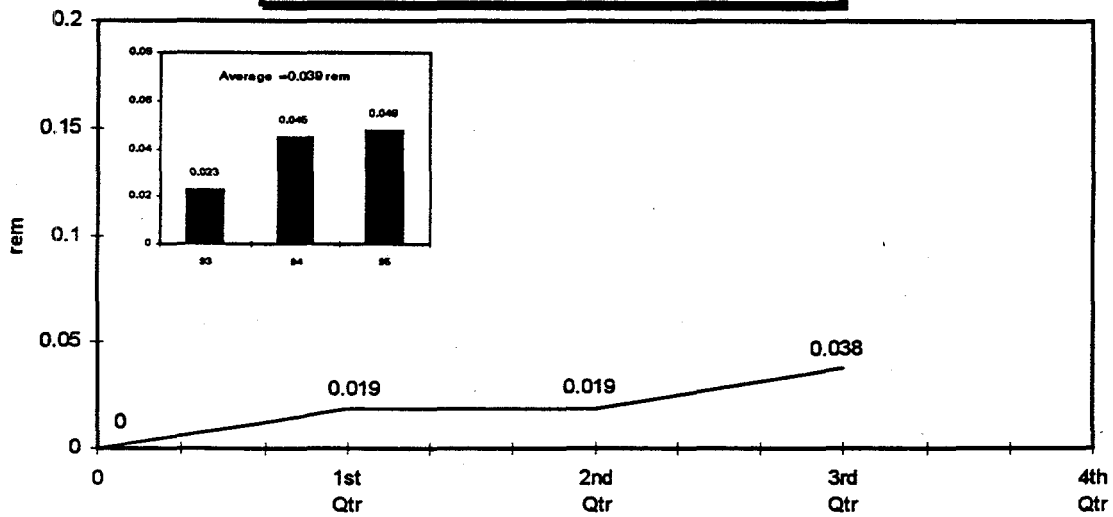
The average worker dose for the ICPP through the end of the third quarter was 0.142 rem.

**ICPP CY-96 Year to Date
Maximum Penetrating Dose to a Worker**



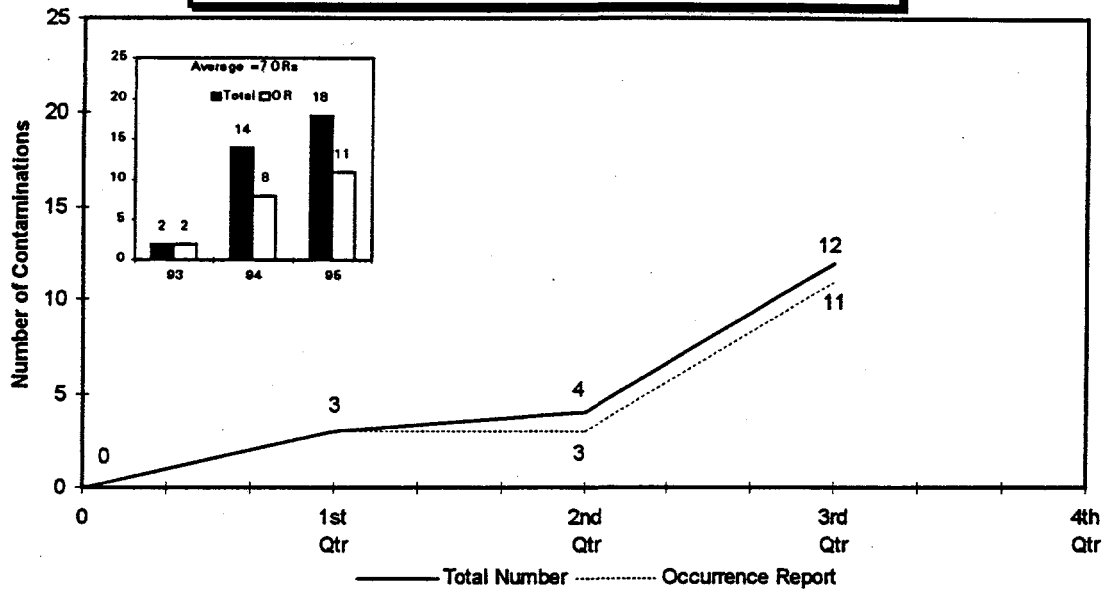
The ICPP maximum penetrating radiation dose to a worker through the end of the third quarter was 1.343 rem.

**ICPP CY-96 Year to Date
Maximum Neutron Dose to a Worker**



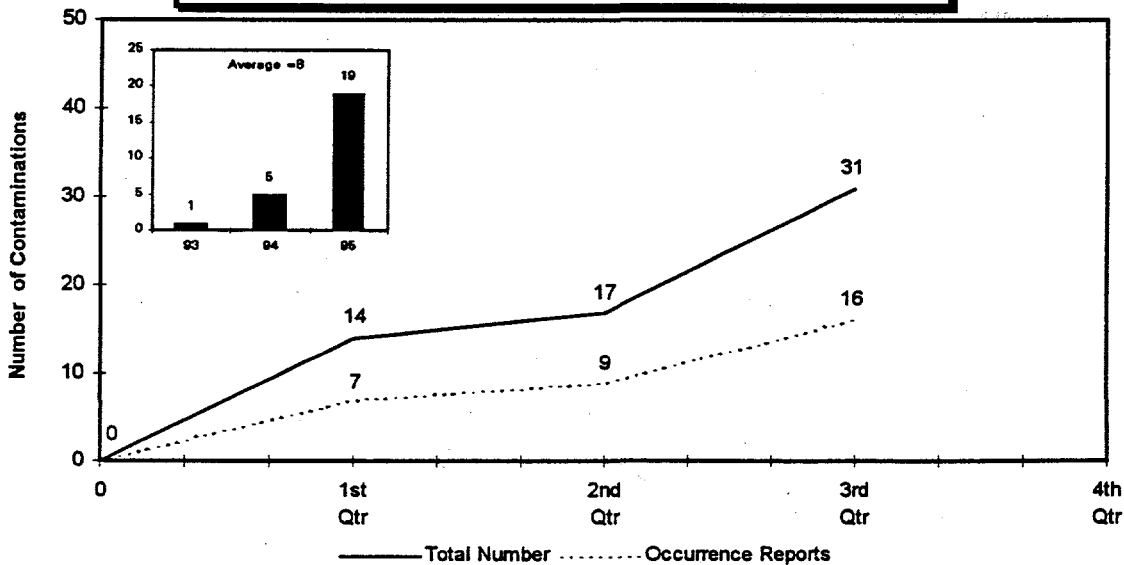
The ICPP maximum neutron radiation dose to a worker through the end of the third quarter was 0.038 rem.

ICPP CY-96 Year to Date Skin Contaminations



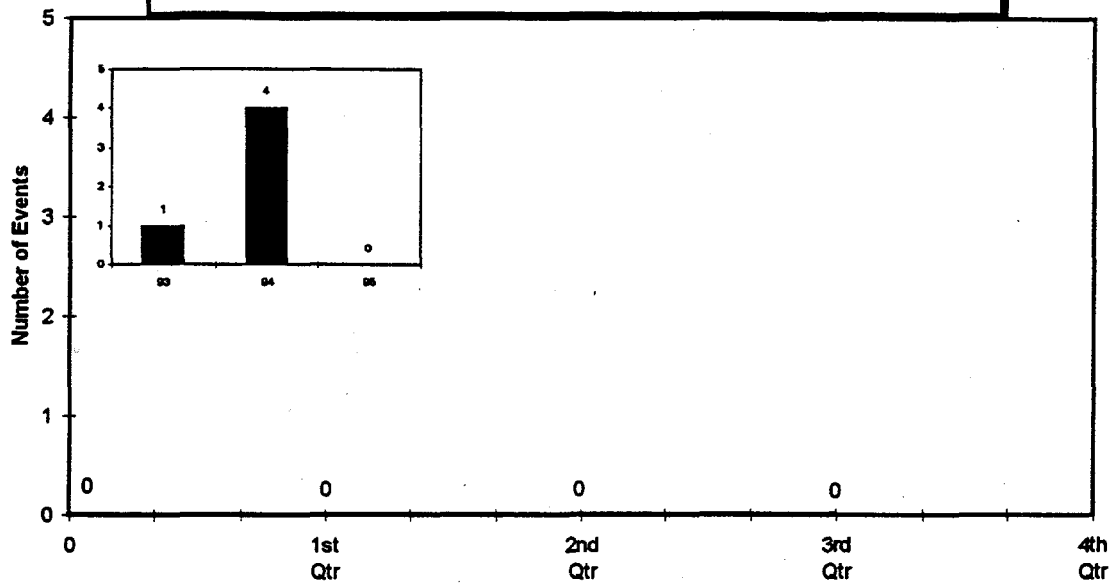
The ICPP had eight skin contaminations during the third quarter. Eight resulted in ORs, and Seven resulted in facial contaminations. There were no contaminated wounds during the third quarter.

ICPP CY-96 Year to Date Clothing Contaminations



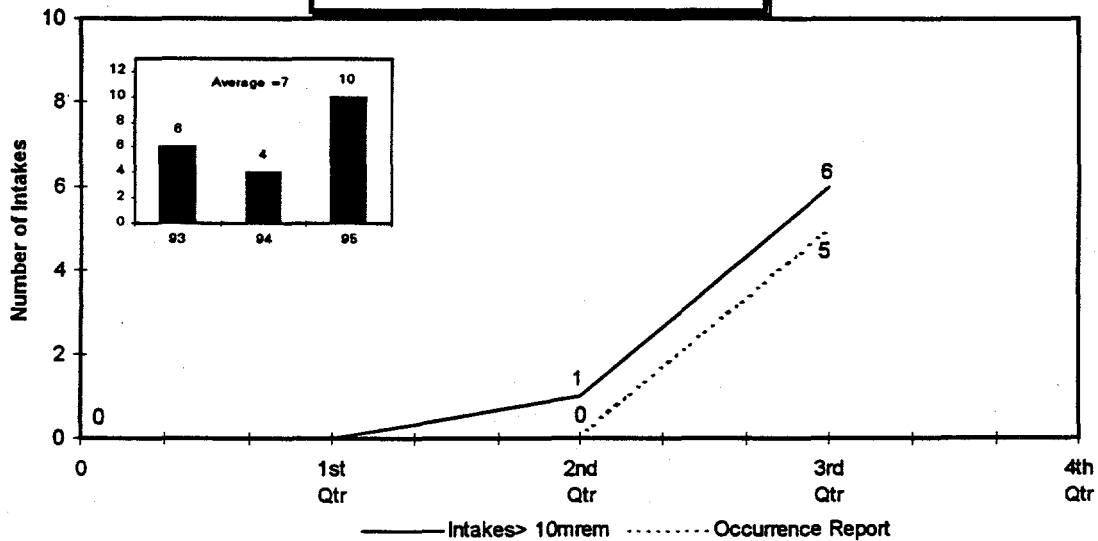
Fourteen clothing contaminations were reported during the third quarter at the ICPP. Seven resulted in ORs.

ICPP CY-96 Year to Date Airborne Radioactivity Events



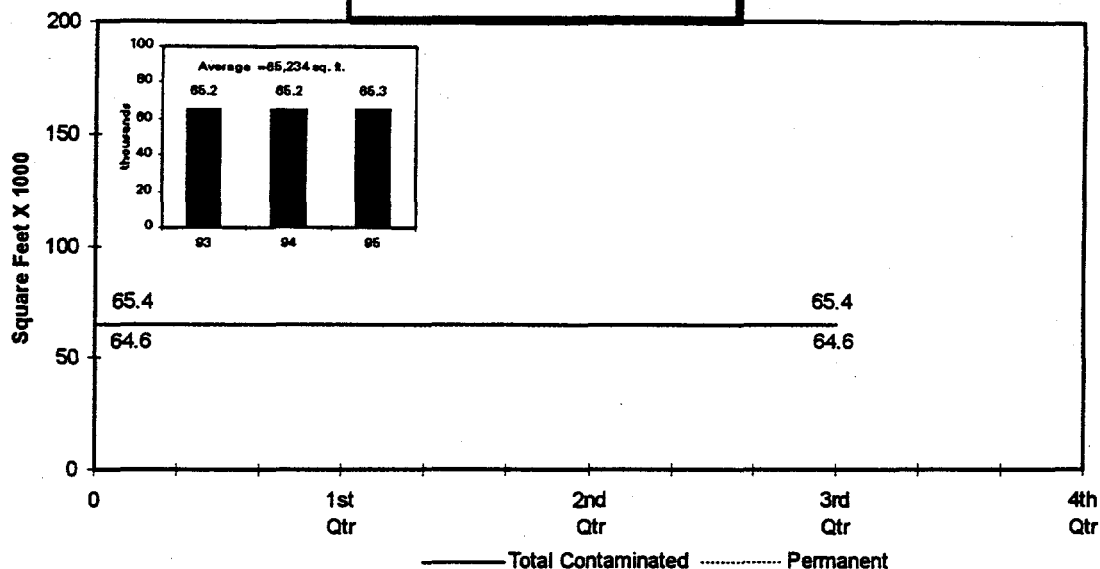
No airborne activity greater than 10 % DAC in unposted areas was detected in ICPP areas during the third quarter.

ICPP CY-96 Year to Date Radioactive Material Intakes



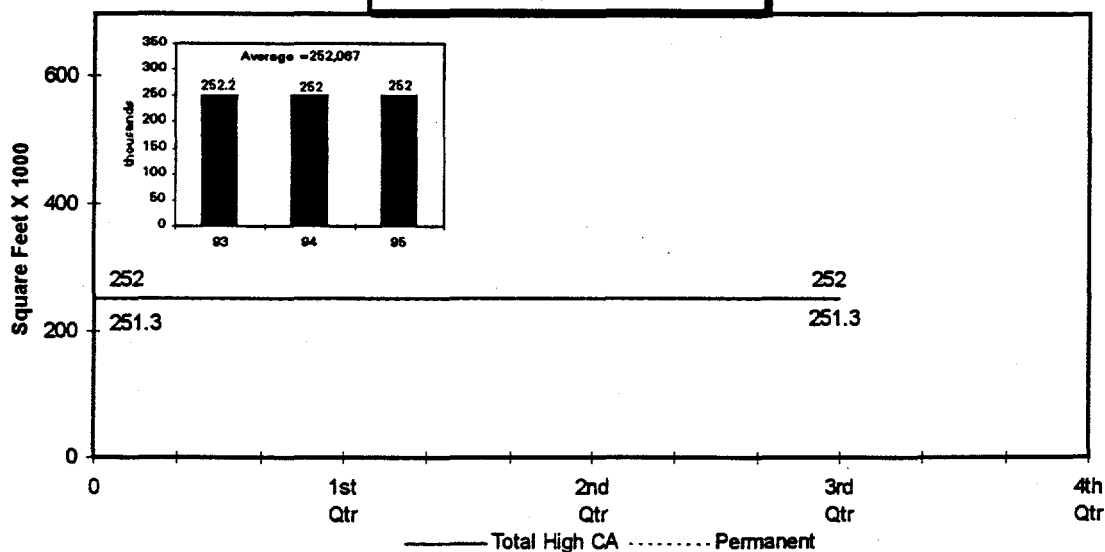
Six positive bioassays year to date at the ICPP have resulted in a dose assessment of 10 mrem or greater. These six are recorded as intakes of Radioactive material. Five of the intakes have resulted in ORs.

ICPP CY-96 Year to Date Contamination Area



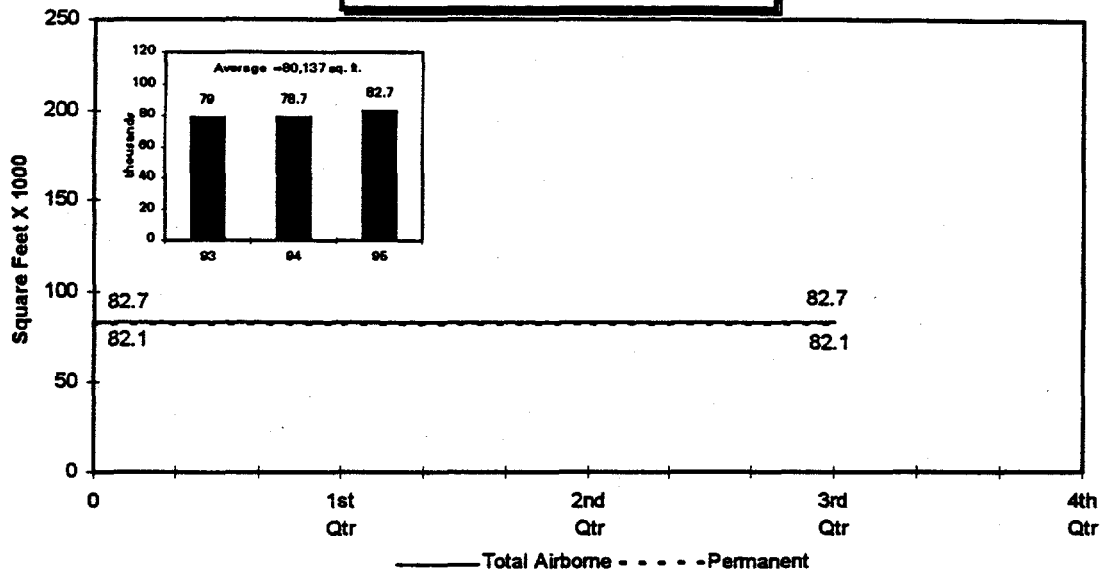
Total Contamination Area at the ICPP at the end of the third quarter remains constant at 65,419 square feet. 64,684 square feet is designated as permanent and in-use.

ICPP CY-96 Year to Date High Contamination Area



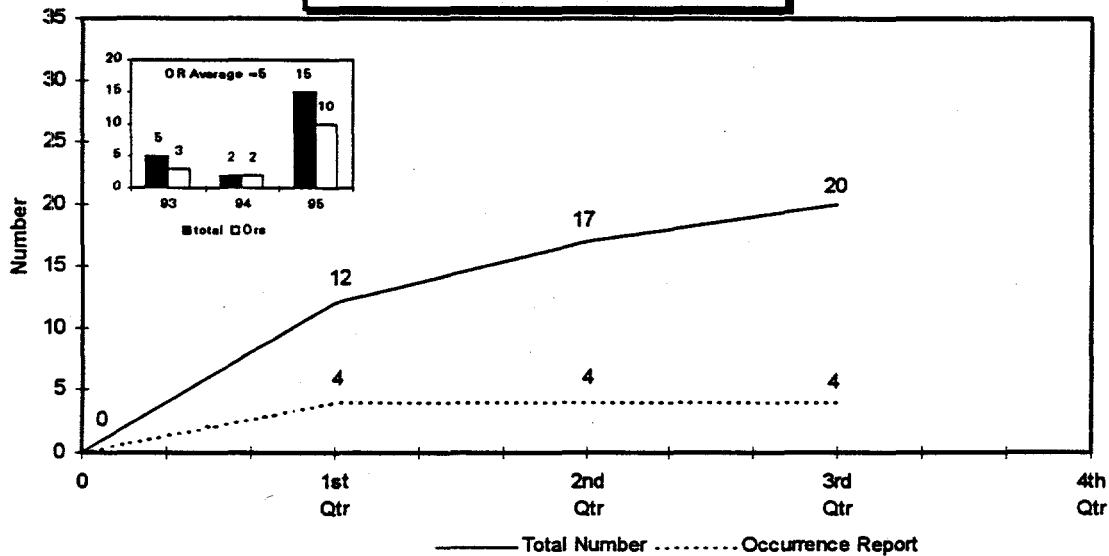
The total High Contamination Area at the ICPP remains at 251,961 square feet at the end of the third quarter. 252,311 square feet is designated as permanent and in-use.

ICPP CY-96 Year to Date Airborne Radioactivity Area



Total Airborne Radioactivity Area at the ICPP at the end of the third quarter remains at 82,712 square feet. 82,062 square feet is designated as permanent and in-use.

ICPP CY-96 Year to Date Spills



The ICPP had three spills or loss of control of radioactive material during the third quarter. None of these three spills were reportable.

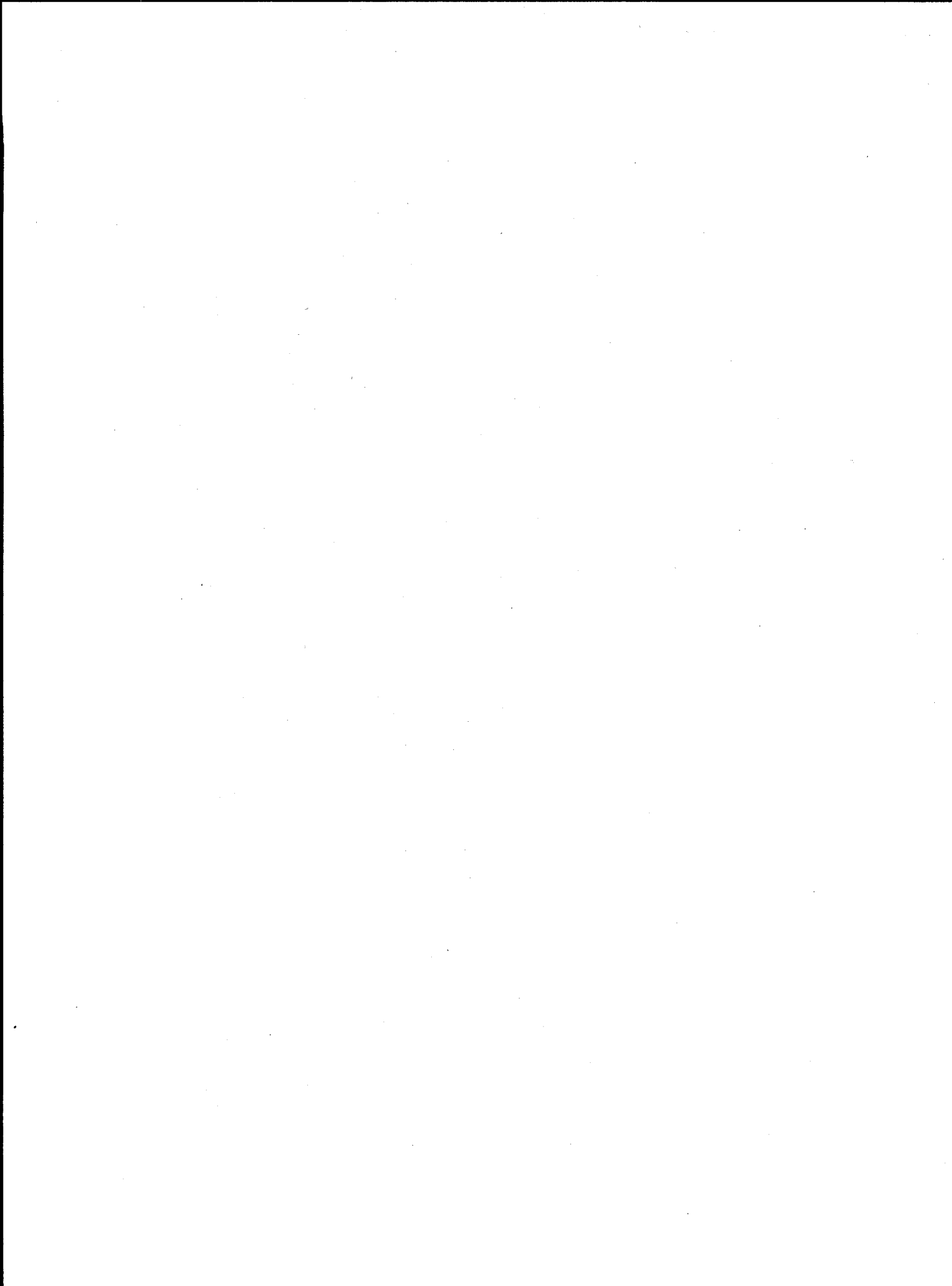
Power Burst Facility

Waste Reduction Operations Complex

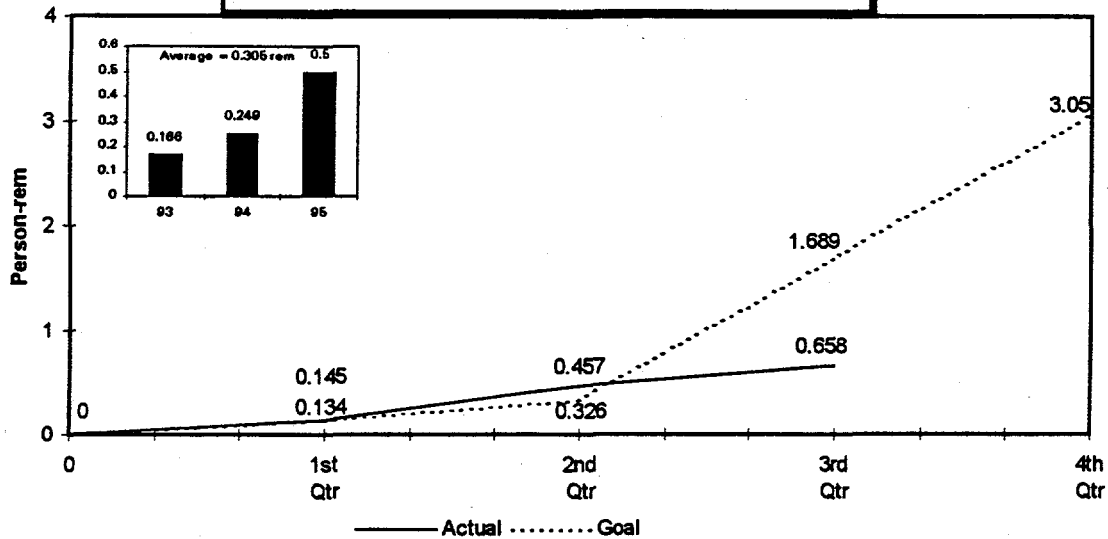
Waste Experimental Reduction Facility

(PBF/WROC)

Major contributor to the third quarter occupational radiation exposure in the PBF/WROC reporting area were the repackaging of mixed waste, sizing low level waste, waste inventory, incineration, and receiving and shipping of mixed waste.

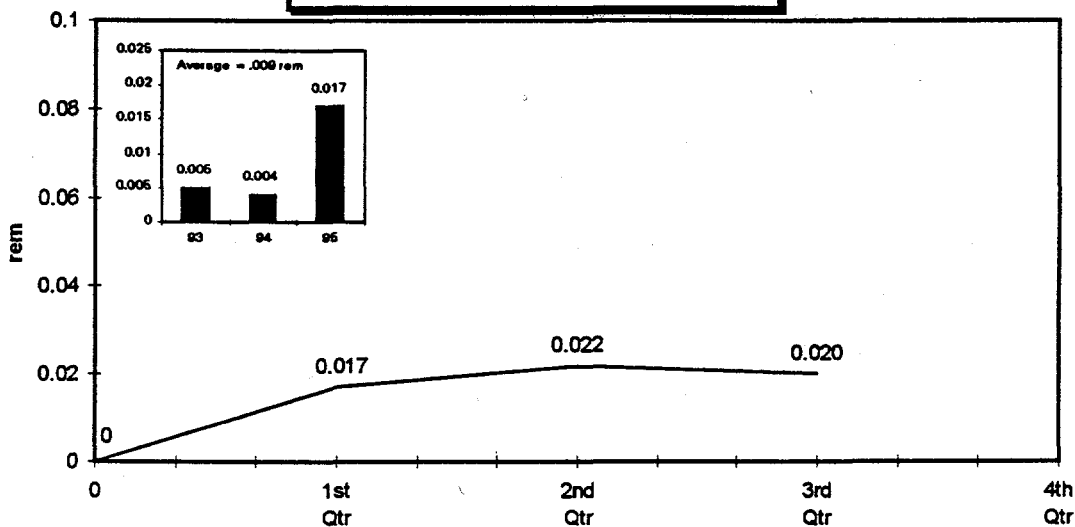


**PBF/WROC CY-96 Collective Year to Date
Penetrating Radiation Dose**



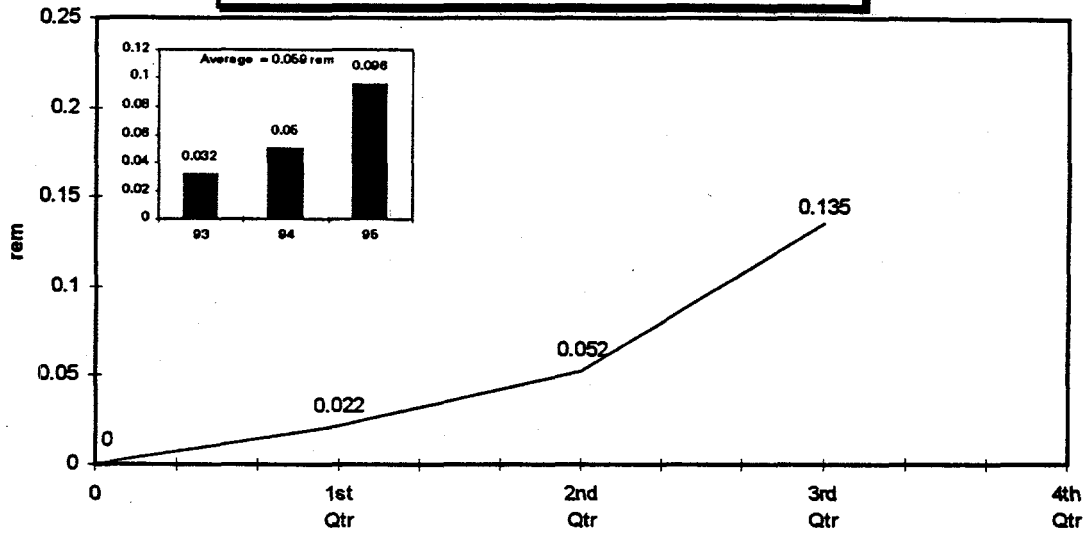
PBF/WROC collective penetrating radiation exposure through the end of the third quarter was 0.728 person rem.

**PBF/WROC CY-96 Year to Date
Average Worker Dose**



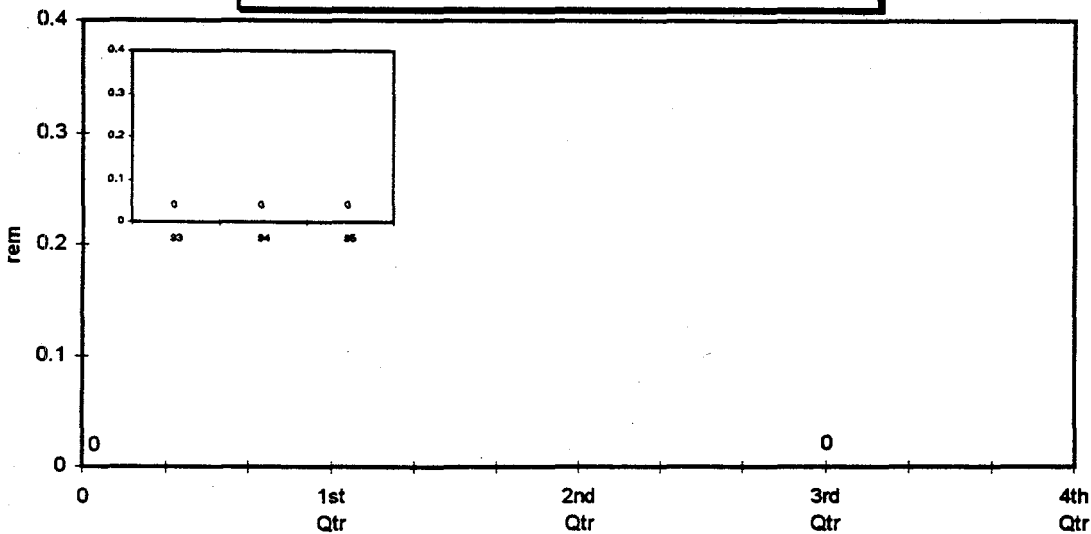
The PBF/WROC average worker dose through the end of the third quarter was 0.020 rem.

PBF/WROC CY-96 Maximum Year to Date Penetrating Dose to a Worker



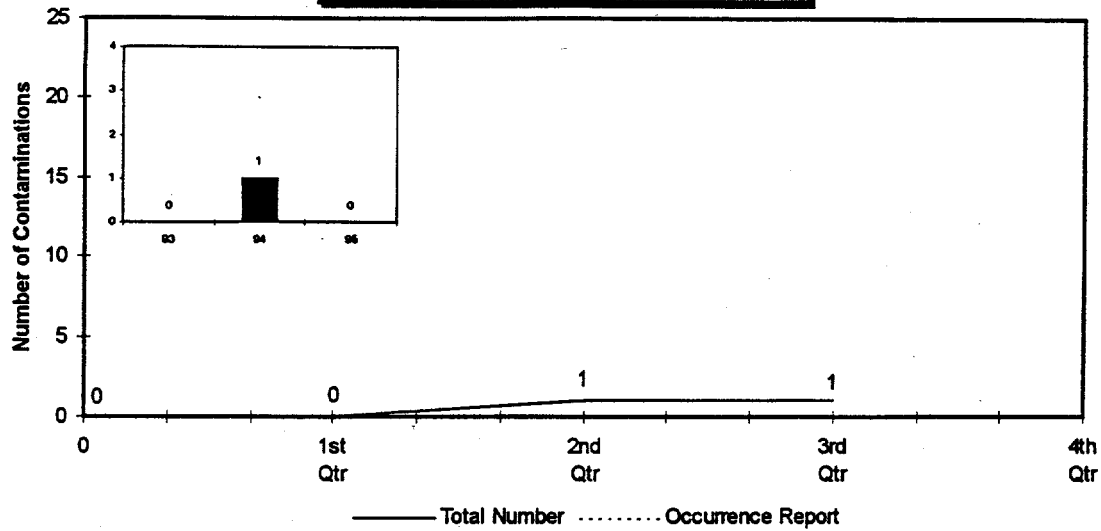
The maximum penetrating radiation dose to a PBF/WROC worker through the end of the third quarter was 0.135 rem.

PBF/WROC CY-96 Maximum Year to Date Neutron Dose to a Worker



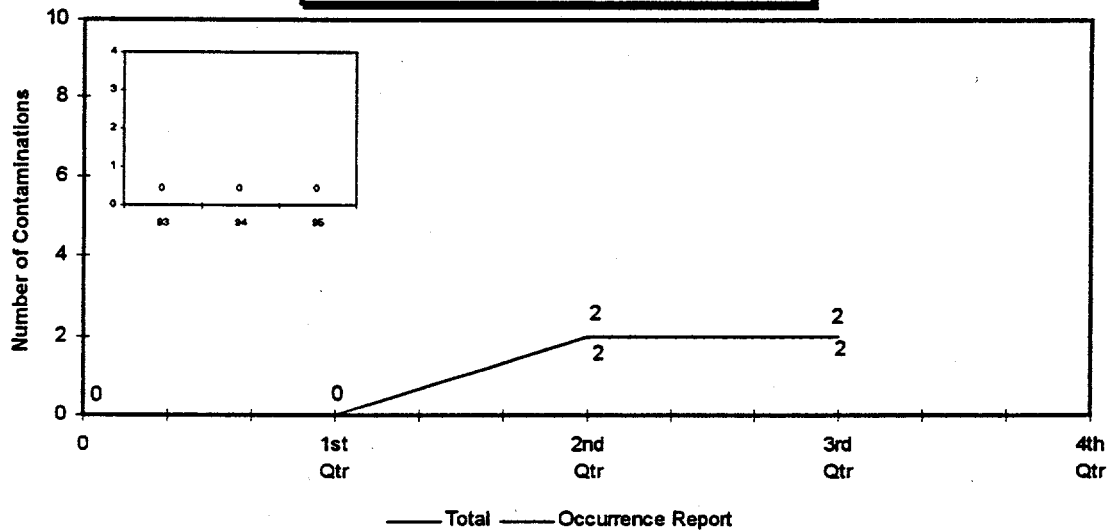
The maximum neutron radiation dose to a worker at the end of the third quarter remains at zero rem.

**PBF/WROC CY-96 Year to Date
Skin Contaminations**



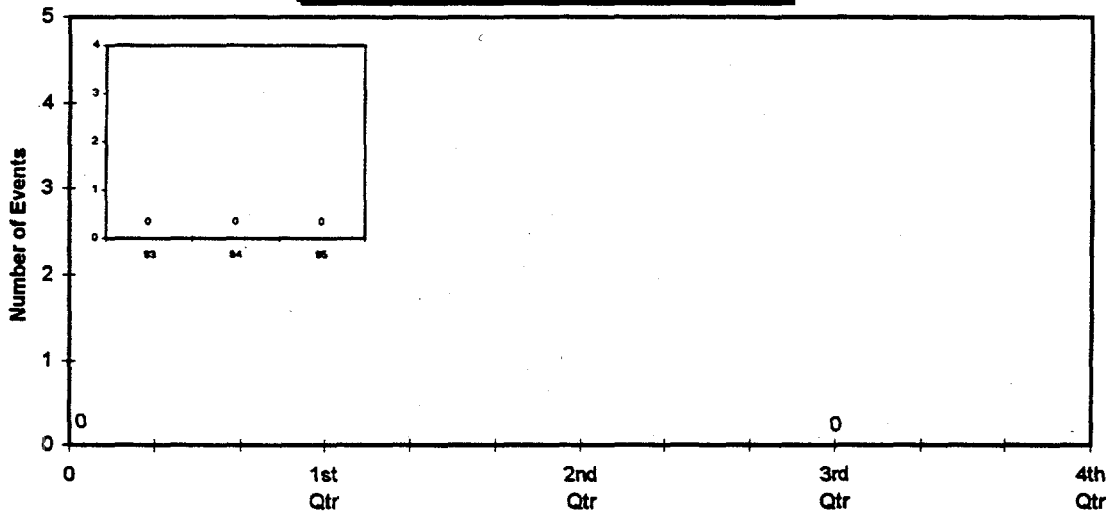
There were no reportable skin contaminations at the PBF/WROC areas during the third quarter.

**PPBF/WROC CY-96 Year to Date
Clothing Contaminations**



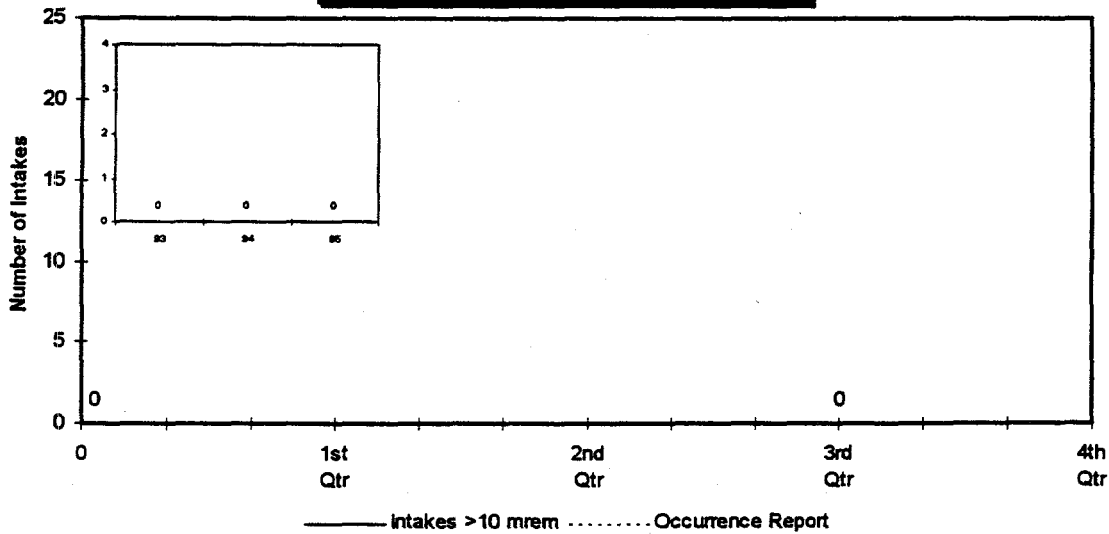
There were no additional clothing contaminations at the PBF/WROC area during the third quarter

**PBF/WROC CY-96 Year to Date
Airborne Radioactivity Events**



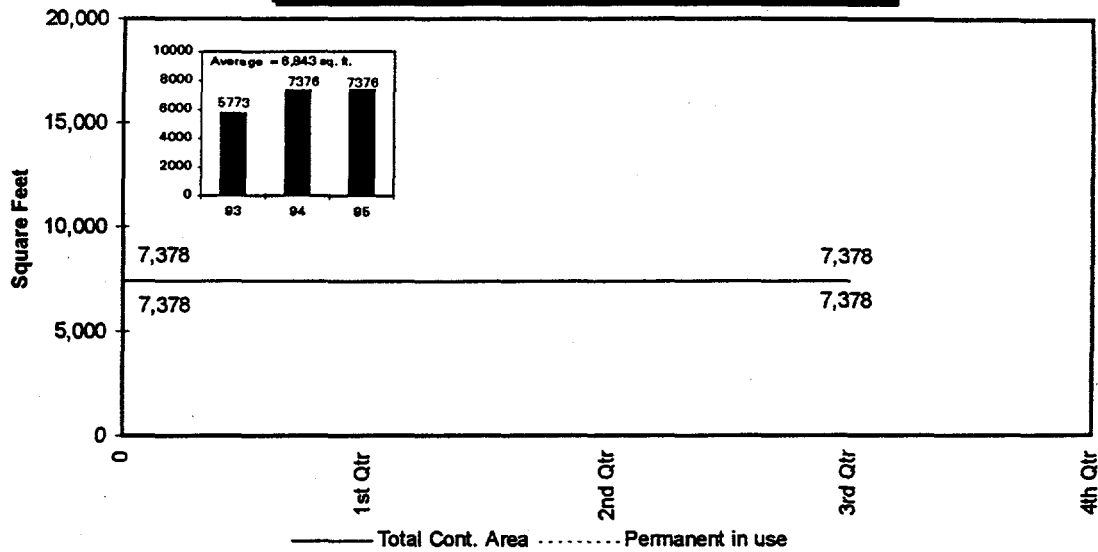
There have been no airborne activity events greater than 10 % DAC detected at the PBF/WROC area through the third quarter.

**PBF/WROC CY-96 Year to Date
Radioactive Material Intakes**



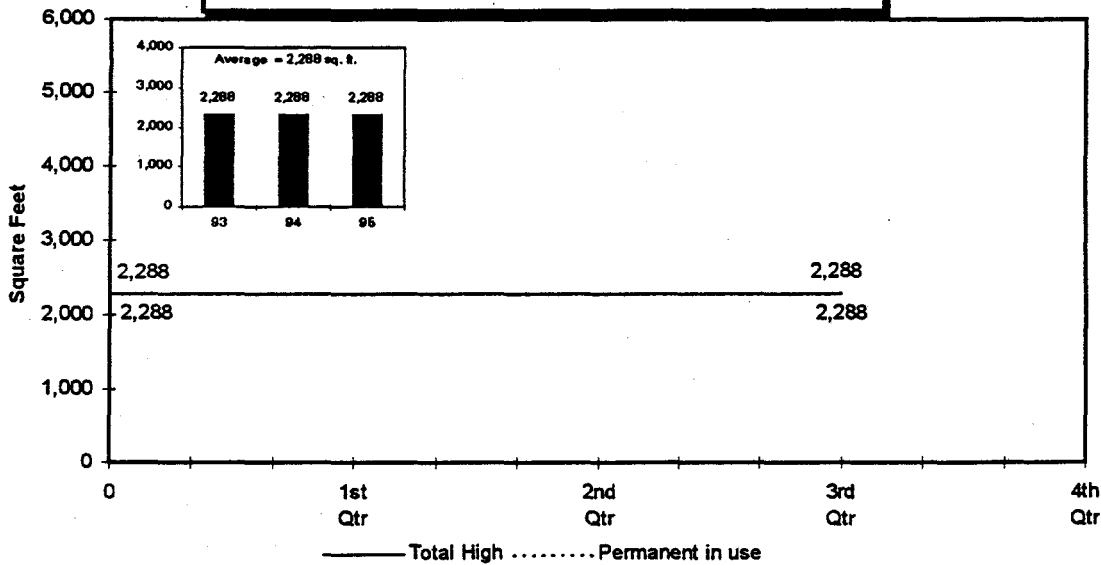
There were no positive bioassays indicating radioactive material intakes that resulted in a dose assessment of 10 mrem or greater in the PBF/WROC area.

PBF/WROC CY-96 Contaminations Area



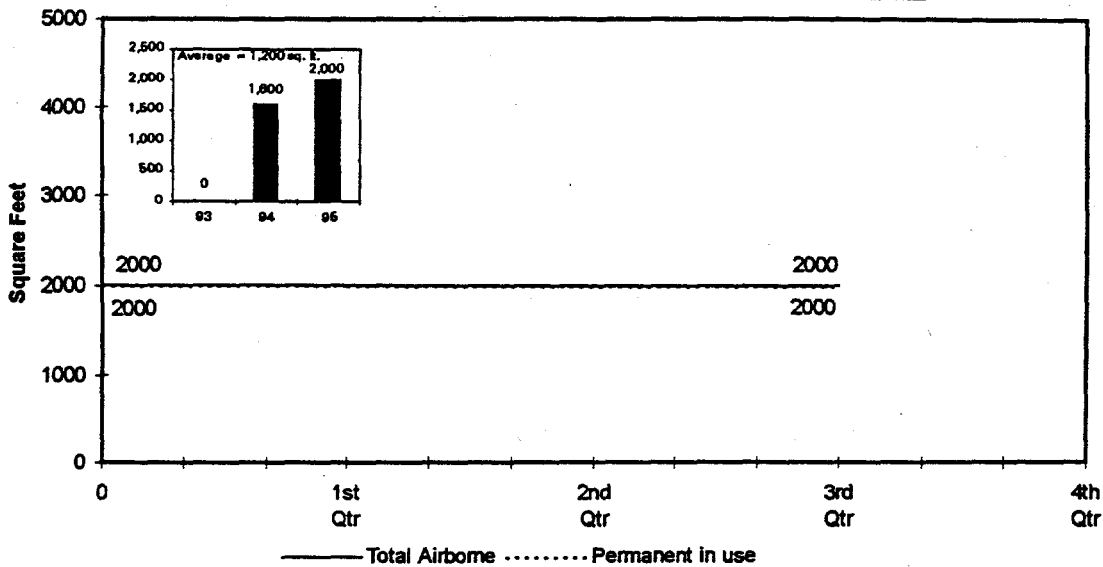
The third quarter Contamination Area for the PBF/WROC area remains at 7,378 square feet. All of this is considered permanent and in-use.

PBF/WROC CY-96 High Contamination Area



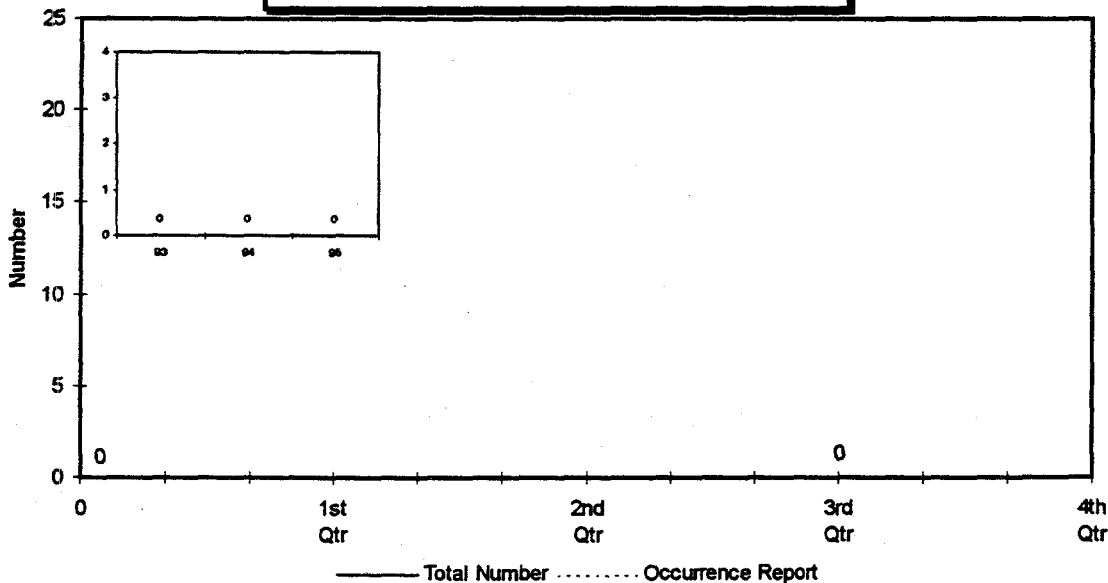
The total High Contamination Area through the end of the third quarter at the PBF/WROC area remains at 2,288 square feet.

PBF/WROC CY-96 Airborne Radioactivity Area



The total Airborne Radioactivity Area at PBF/WROC at the end of the third quarter remained at 2000 square feet. All of this area is designated as permanent and in-use.

PBF/WROC CY-96 Year to Date Spills

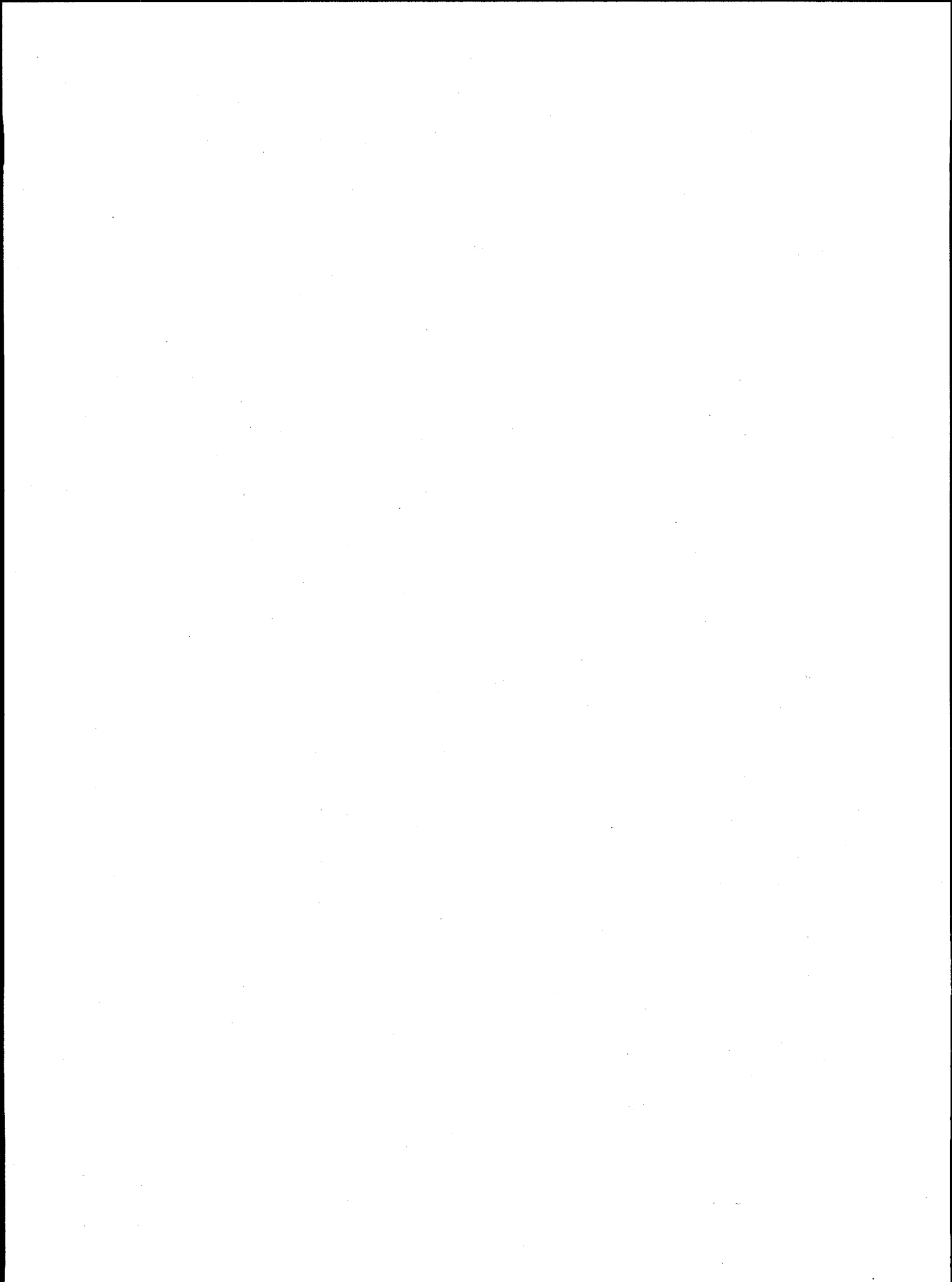


There were no spills or loss of control of radioactive material at PBF/WROC through the end of the third quarter.

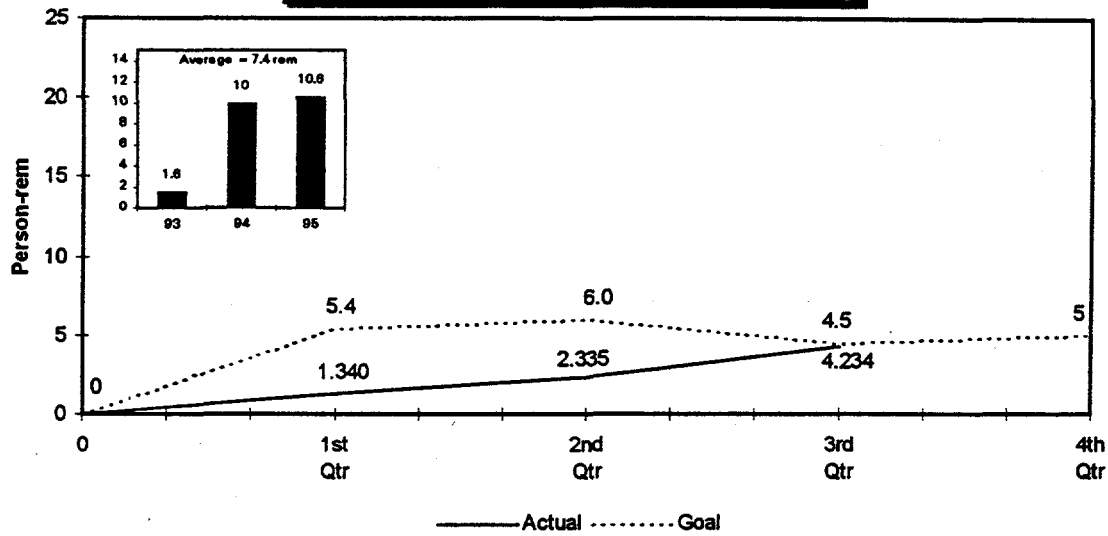
Radioactive Waste Management Complex

Major contributors to the third quarter RWMC occupational radiation exposure have been from transfers to storage modules and low-level disposal operations.

During the third quarter, RWMC reduced its ALARA goal to 5 rem based on reduction of scope and implementation of additional ALARA protective measures.

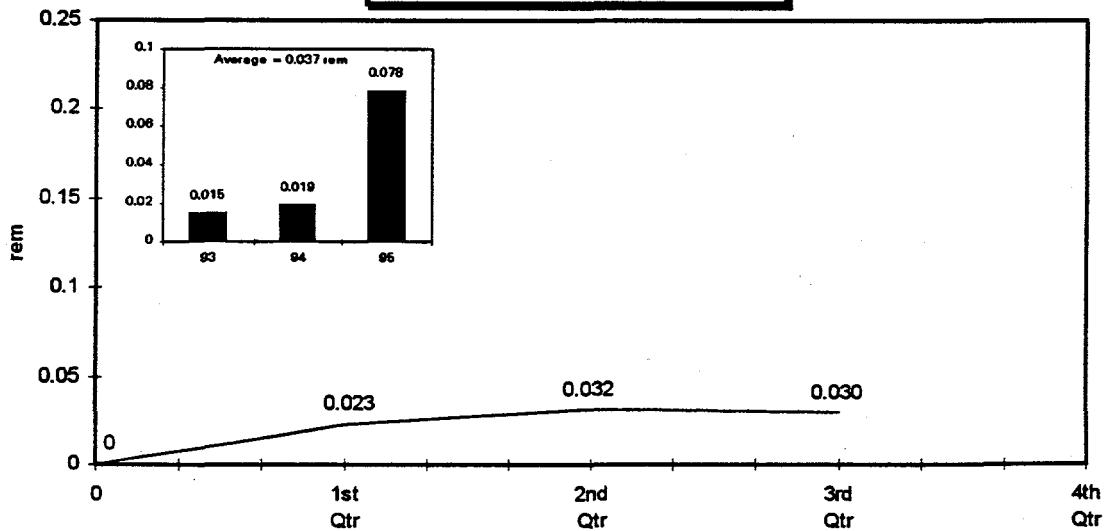


**RWMC CY-96 Collective Year to Date
Penetrating Radiation Dose**



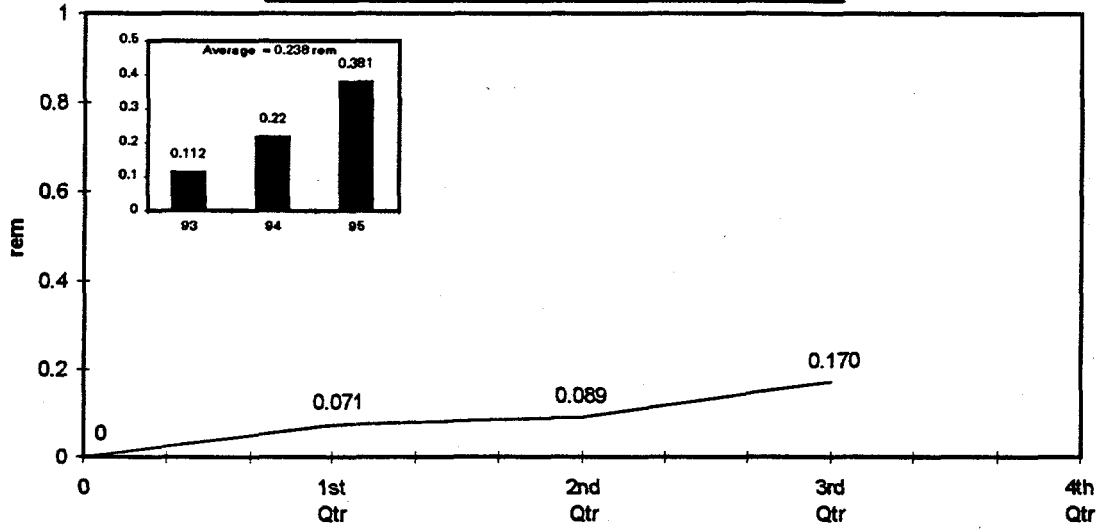
The RWMC collective penetrating radiation exposure through the end of the third quarter was 4.234 person-rem. The goal has been adjusted downward to reflect work scope and ALARA protective measures.

**RWMC CY-96 Year to Date
Average Worker Dose**



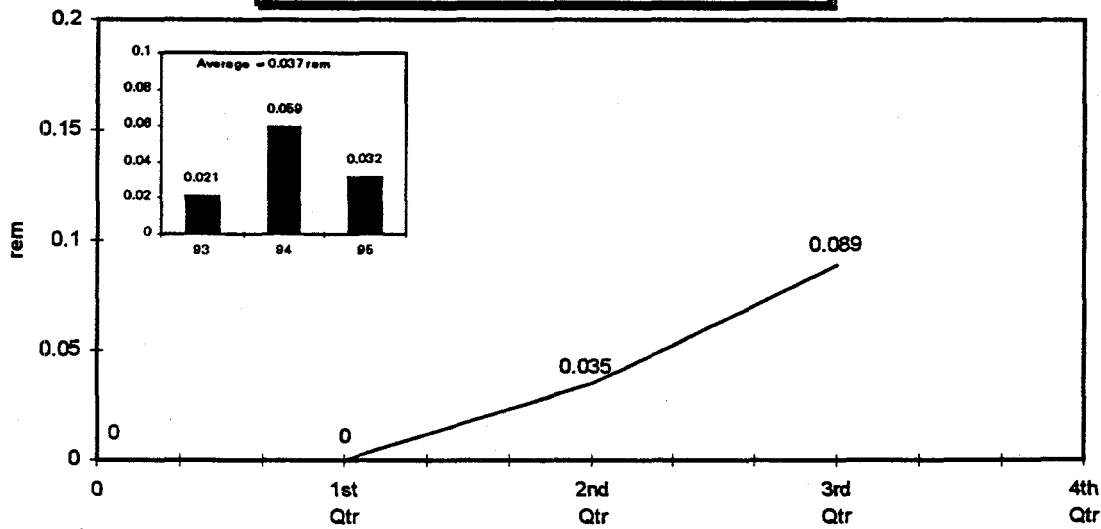
The average worker dose at the RWMC through the end of the third quarter was 0.030 rem

RWMC CY-96 Maximum Year to Date Penetrating Dose to a Worker



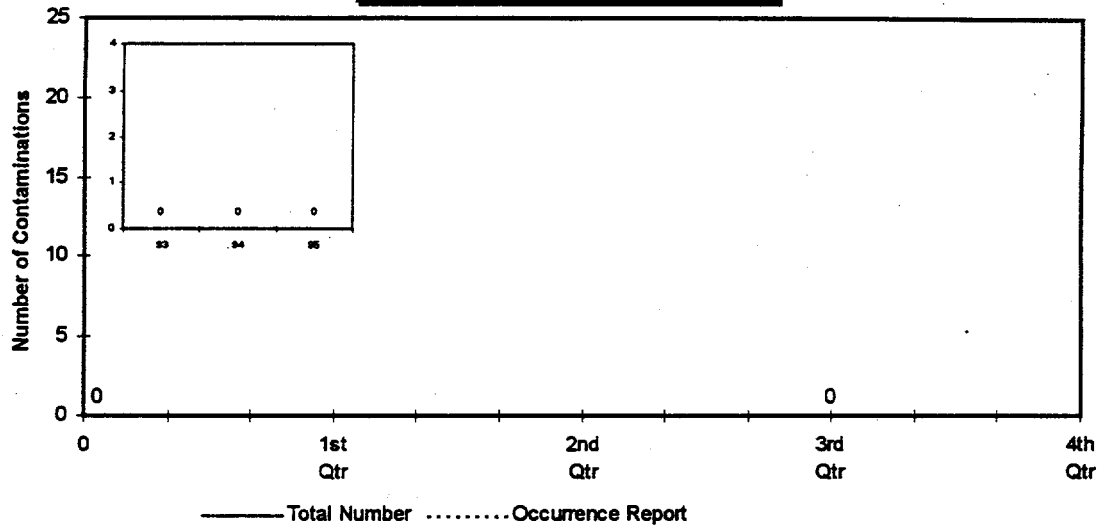
The RWMC maximum penetrating radiation dose to a worker through the end of the third quarter was 0.170 rem.

RWMC CY-96 Maximum Year to Date Neutron Dose to a Worker



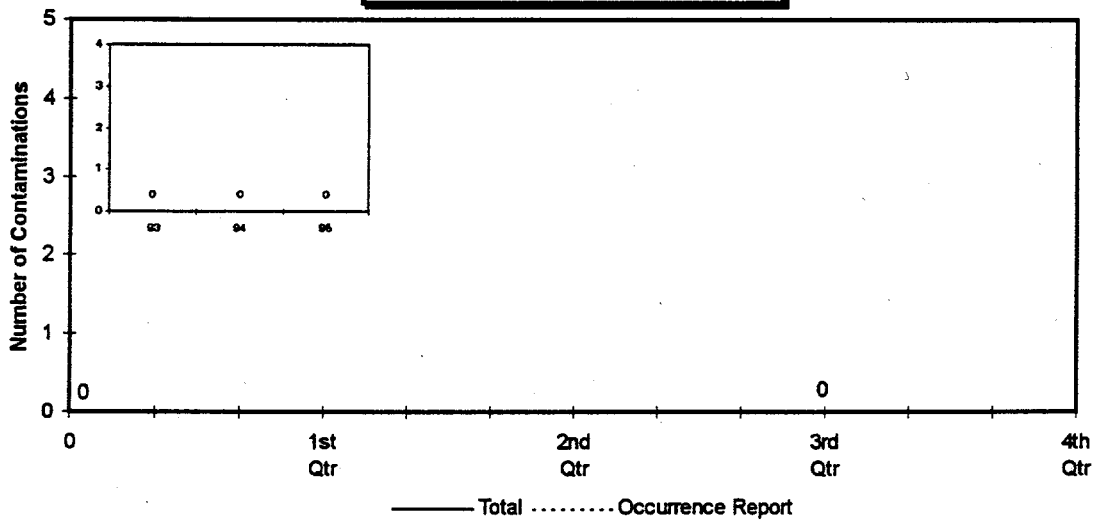
The RWMC maximum neutron radiation dose to a worker through the end of the third quarter was 0.089 rem.

**RWMC CY-96 Year to Date
Skin Contaminations**



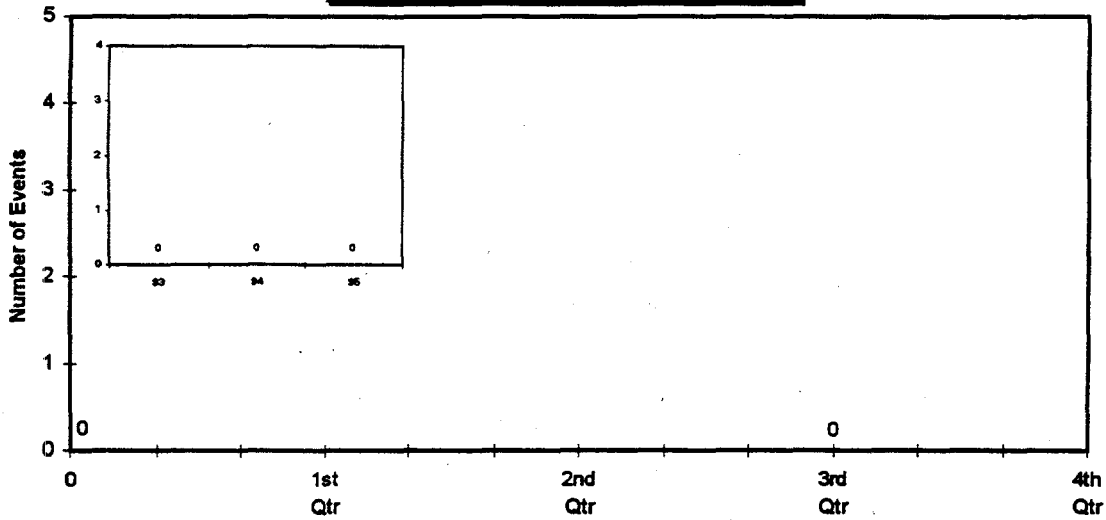
RWMC year to date skin contaminations remain at zero through the end of the third quarter.

**RWMC CY-96 Year to Date
Clothing Contaminations**



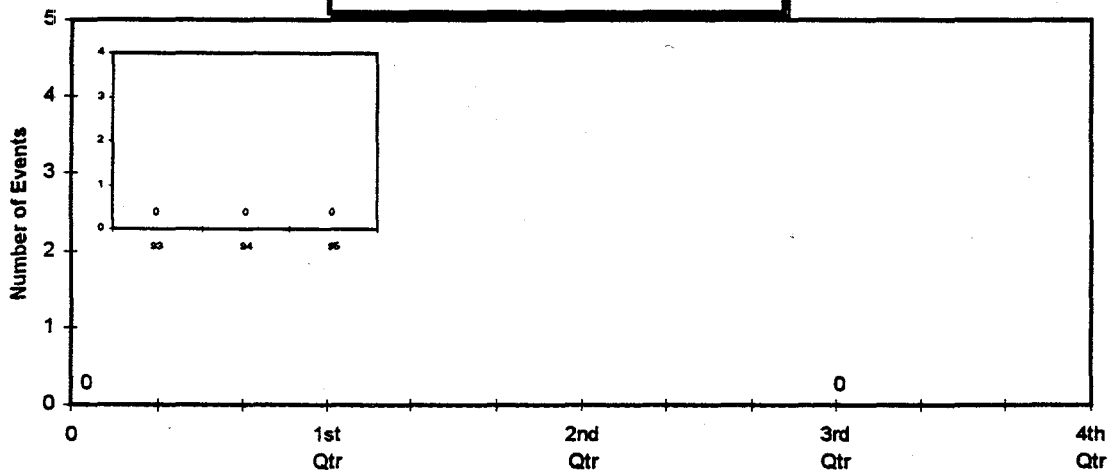
There were no clothing contaminations at the RWMC through the end of the third quarter.

**RWMC CY-96 Year To Date
Airborne Radioactivity Events**



No airborne activity greater than 10 % DAC was detected at RWMC in areas not posted as Airborne Radioactivity Areas through the third quarter.

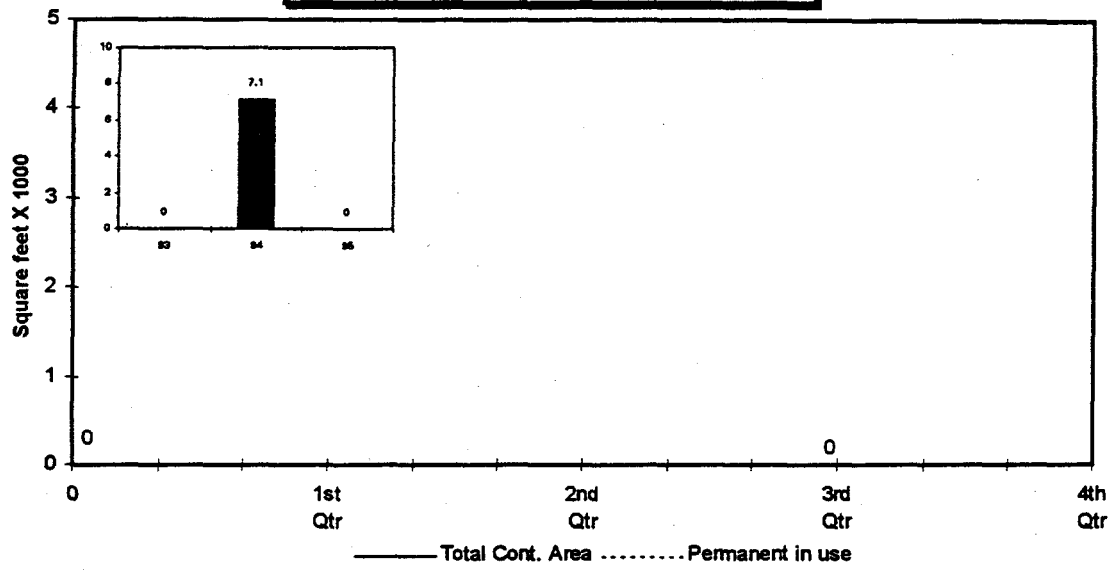
**RWMC CY-96 Year to Date
Radioactive Material Intakes**



—— Intakes >10 mrem Occurrence Report

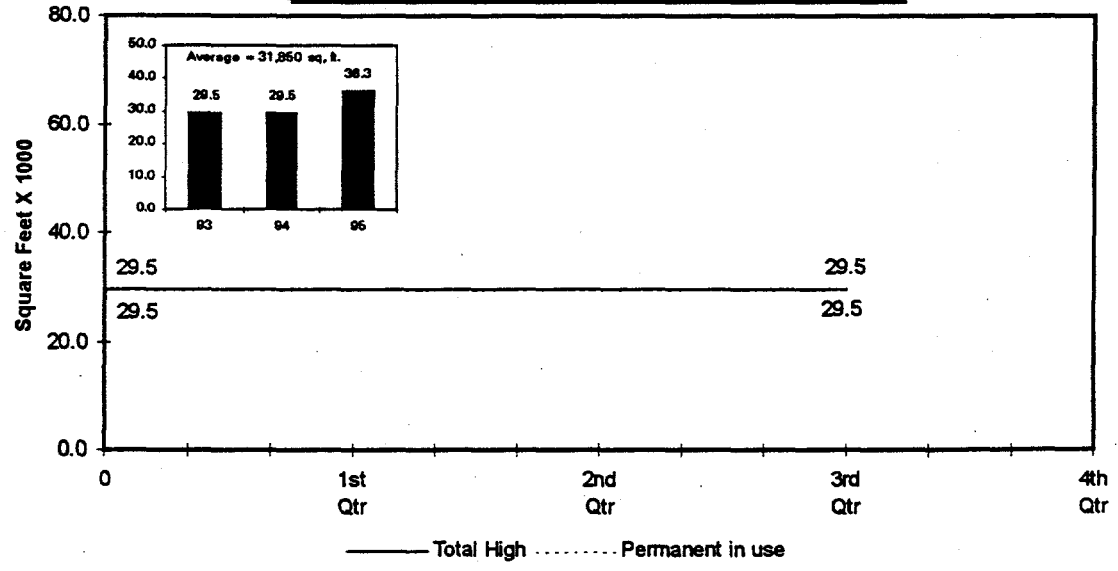
There were no positive bioassays indicating an intake of radioactive material that resulted in a dose assessment of 10 mrem or greater at the RWMC through the end of the third quarter.

RWMC CY-96 Contamination Area



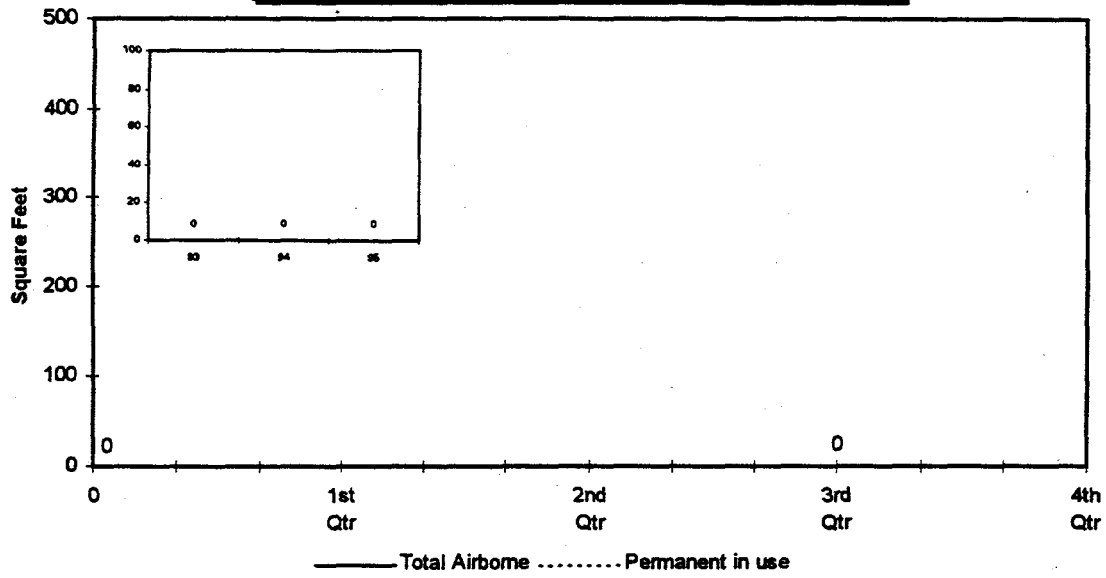
The total Contamination Area at the RWMC through the end of the third quarter remains at zero square feet.

RWMC CY-96 High Contamination Area



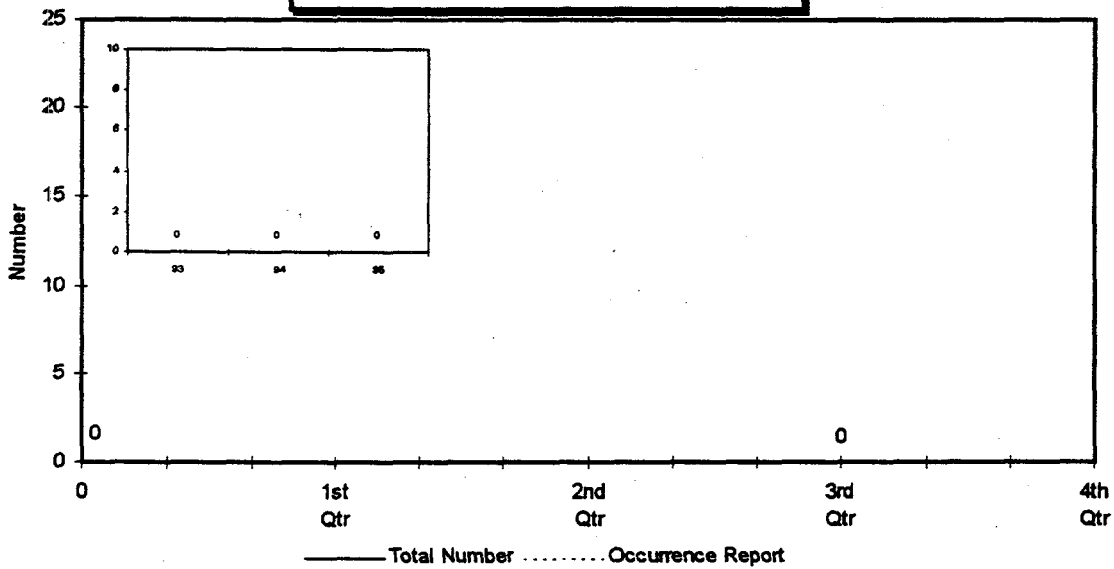
The total High Contamination Area at the RWMC through the end of the third quarter was 29,525 square feet. All of this area was designated as permanent and in-use.

RWMC CY-96 Airborne Radioactivity Area



The total Airborne Radioactivity Area at the RWMC at the end of the third quarter was zero square feet.

RWMC CY-96 Year to Date Spills



There were no spills or loss of control of radioactive material during the third quarter at the RWMC.

Test Reactor Area

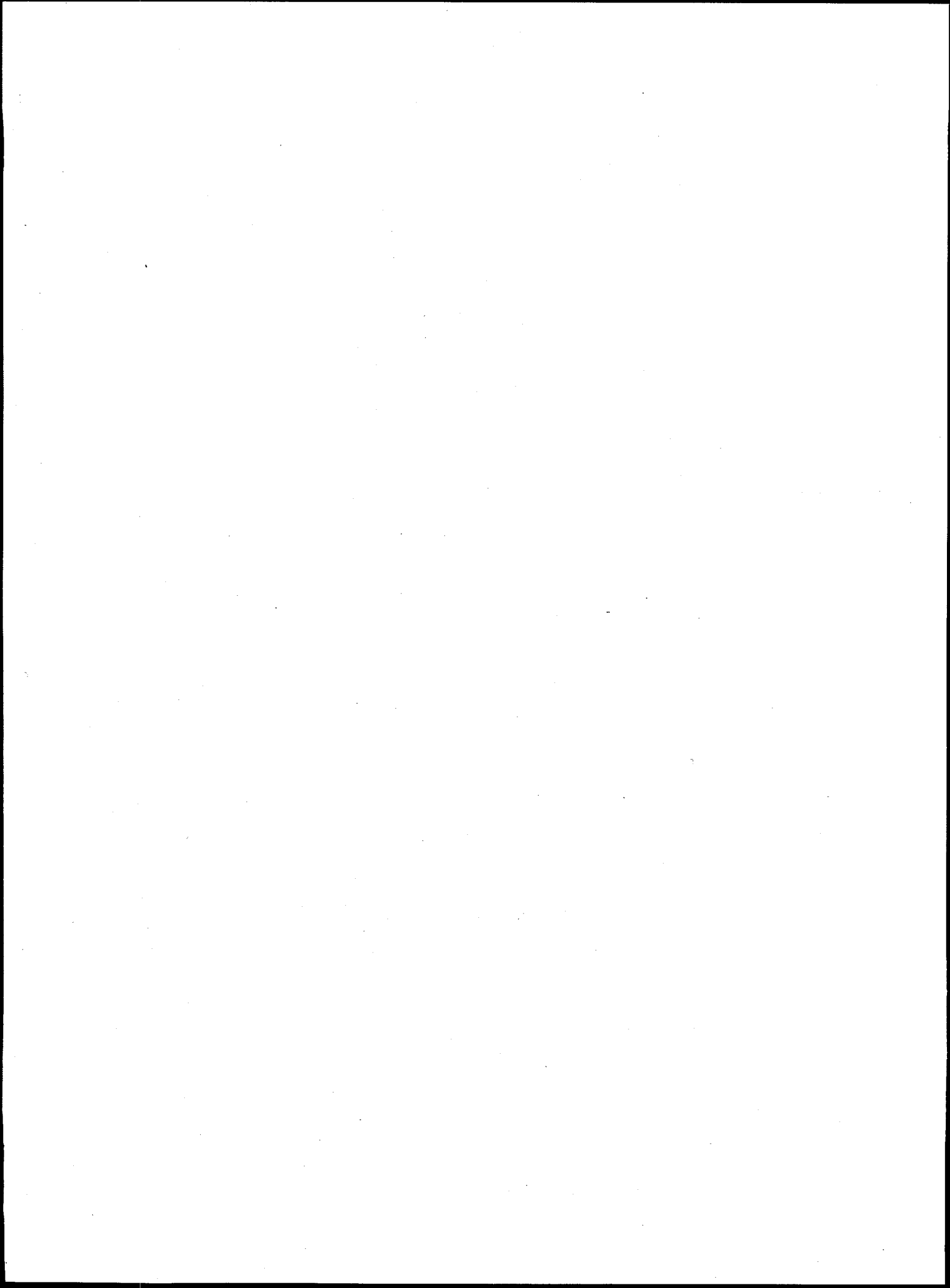
Outages at the Test Reactor Area are responsible for the major portions of dose and the contamination events during the third quarter.

The second quarter neutron dose was adjusted from 0.093 rem to 0.041 rem following an investigation.

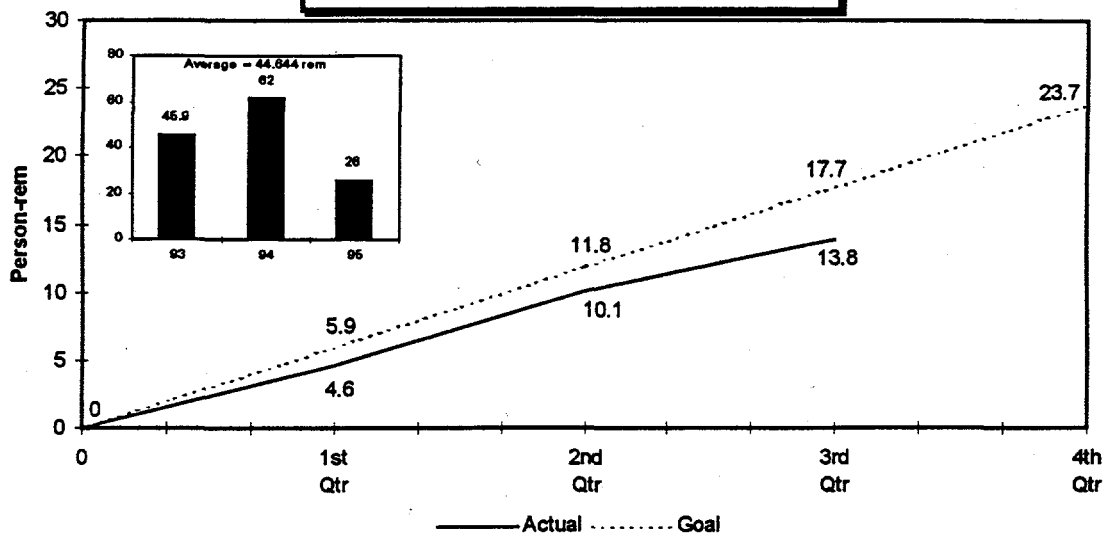
Occurrence reports (ORs) that detail skin and clothing contamination events are as follows:

- OR-LITC-ATR-1996-015-for a third quarter skin contamination
- MTR-1996-001 on 1-25-96, ATR-1996-008 on 3-7-96, MTR-1996-002 on 4-10-96 (these had not been included in earlier reports)
- ID-ATR-1996-016 and ID-ATR-1996-022-for third quarter clothing contaminations.

This performance indicator report reflects adjustments in the clothing contaminations based on review of events occurring throughout the year.

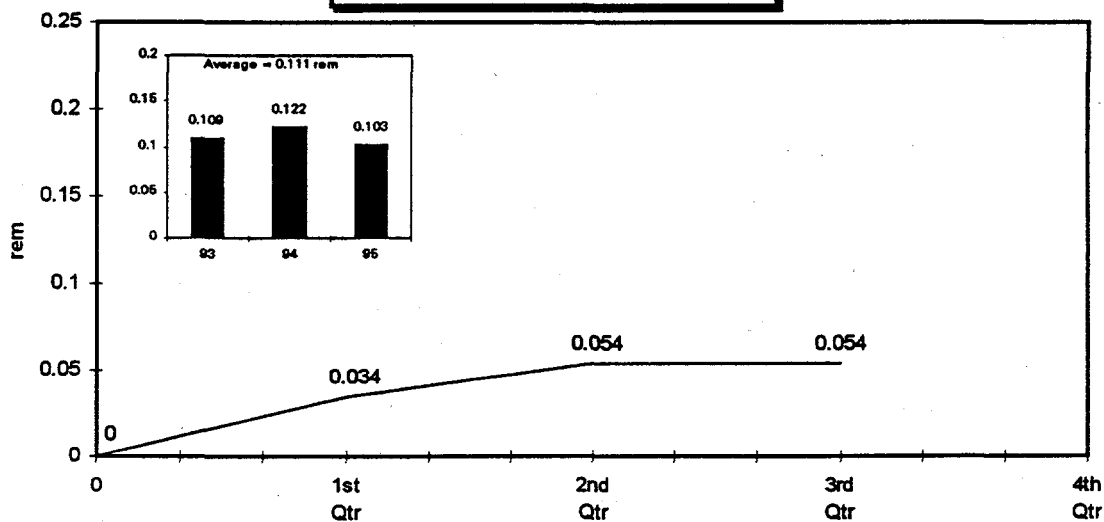


TRA CY-96 Collective Year to Date Penetrating Radiation Dose



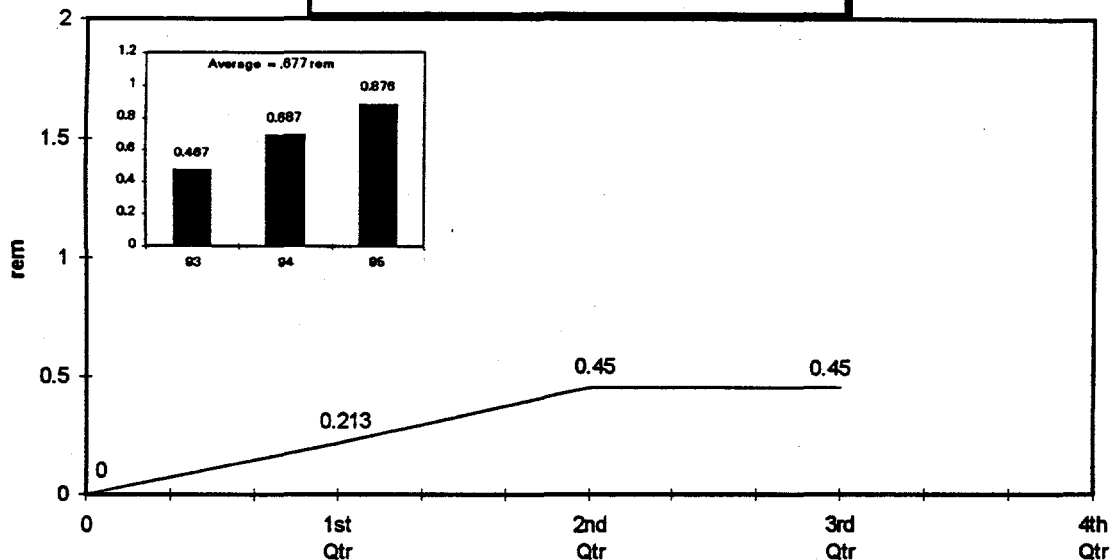
Collective penetrating radiation dose through the end of the third quarter at the TRA was 13.822 person rem.

TRA CY-96 Average Year To Date Worker Dose



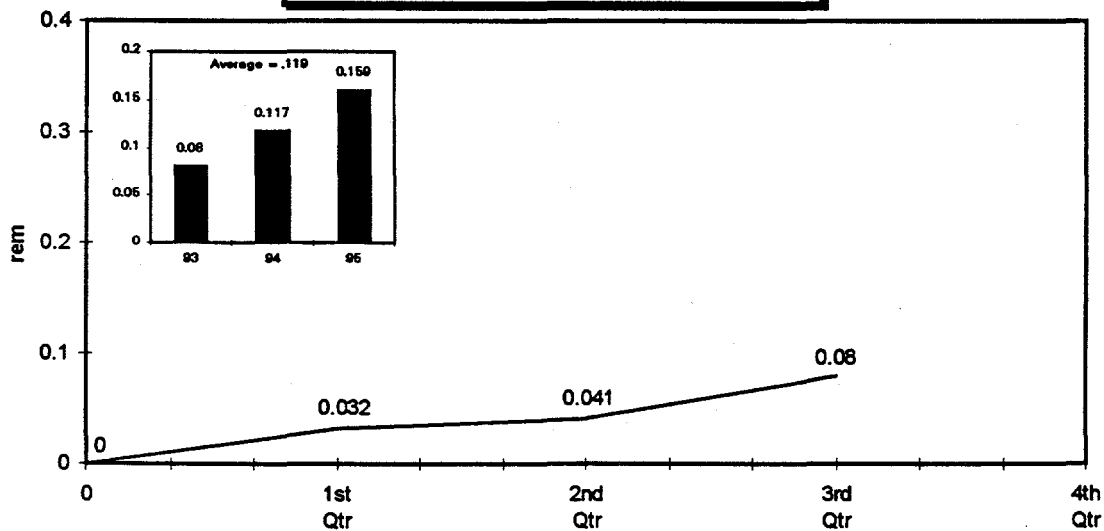
The average worker dose at the TRA through the end of the third quarter was 0.054 rem.

TRA CY-96 Maximum Year to Date Penetrating Dose to a Worker



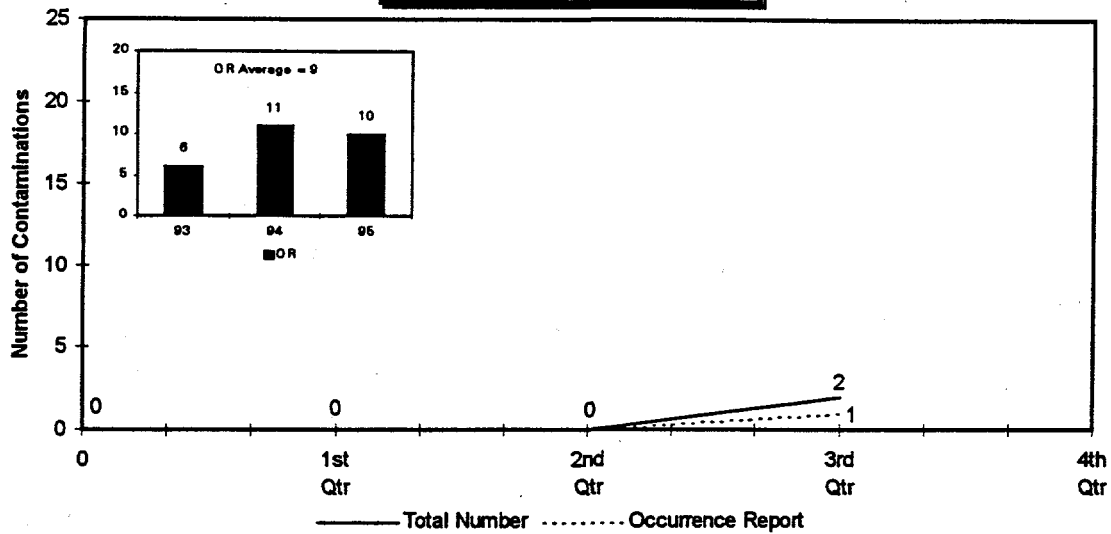
The maximum penetrating radiation dose to a TRA worker through the end of the third quarter was 0.450 rem.

TRA CY-97 Maximum Year to Date Neutron Dose to a Worker



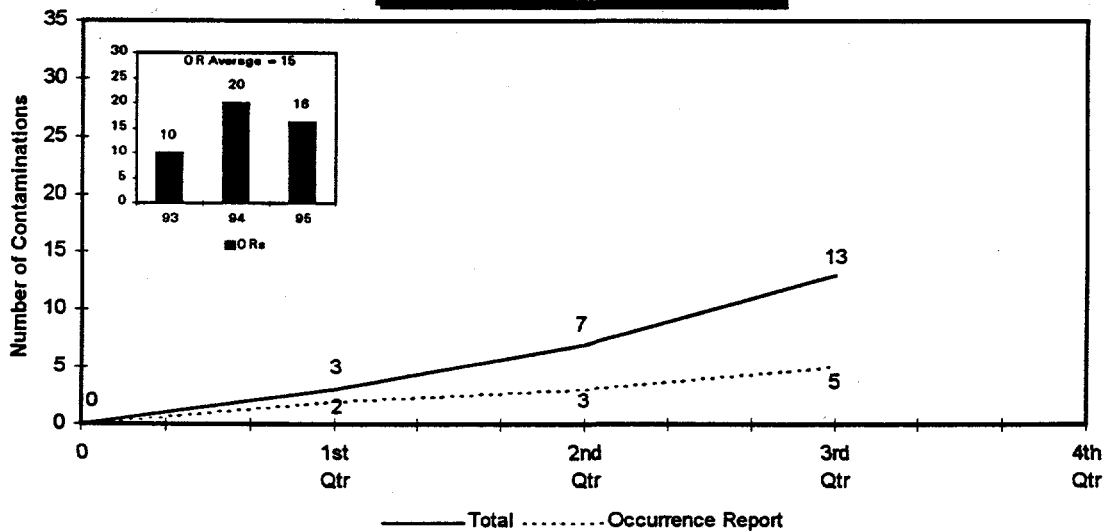
The TRA maximum neutron radiation dose to a worker through the end of the third quarter was 0.080 rem.

**TRA CY-96 Year to Date
Skin Contaminations**



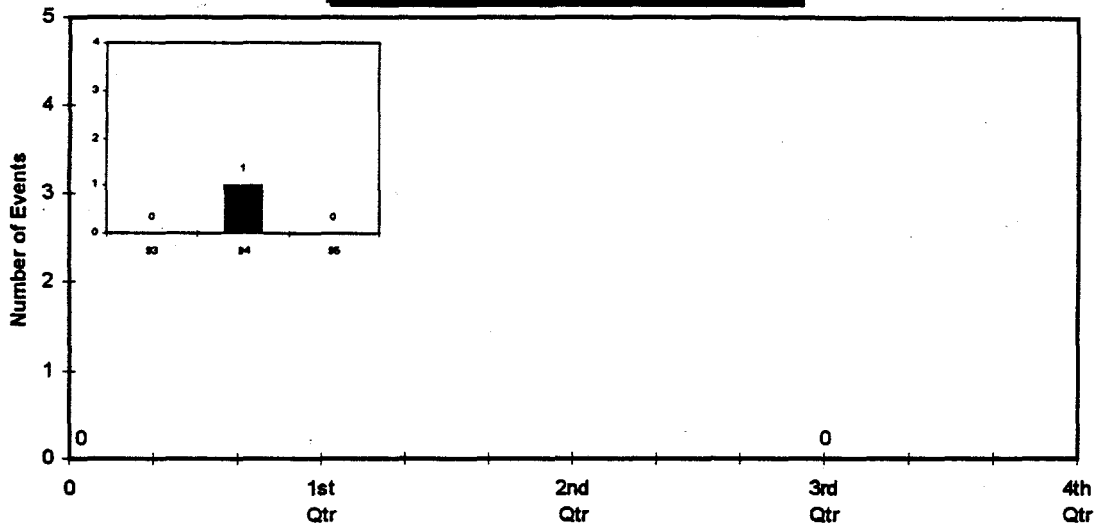
There were two skin contaminations at the TRA through the third quarter, one of which resulted in an OR, OR-LITC-ATR-1996-015.

**TRA-CY-96 Year to Date
Clothing Contaminations**



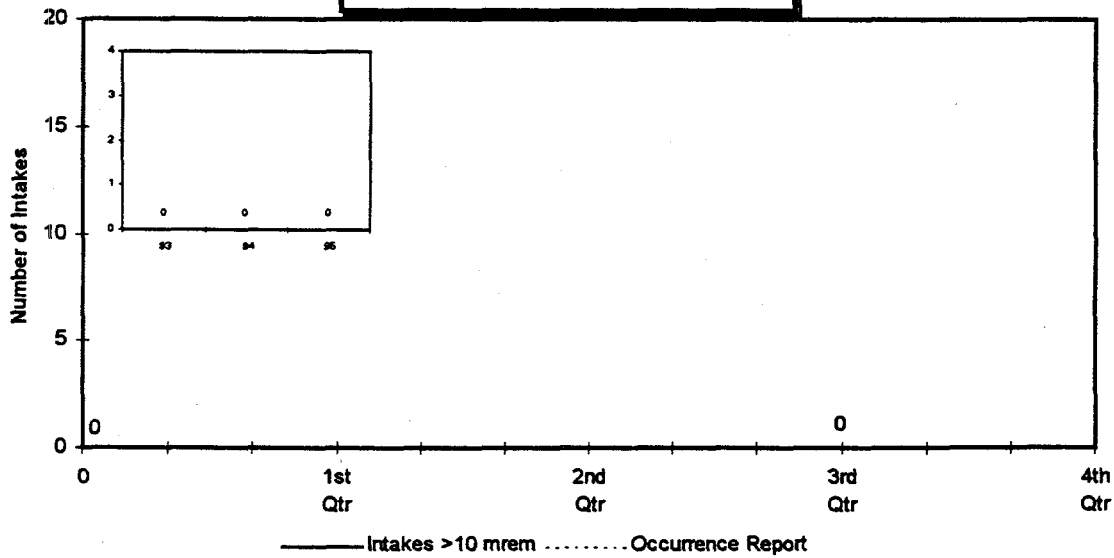
There were six clothing contaminations at the TRA during the third quarter. Two resulted in ORs, ID-ATR-1996-016 and ID-ATR-1996-022.

**TRA CY-96 Year to Date
Airborne Radioactivity Events**



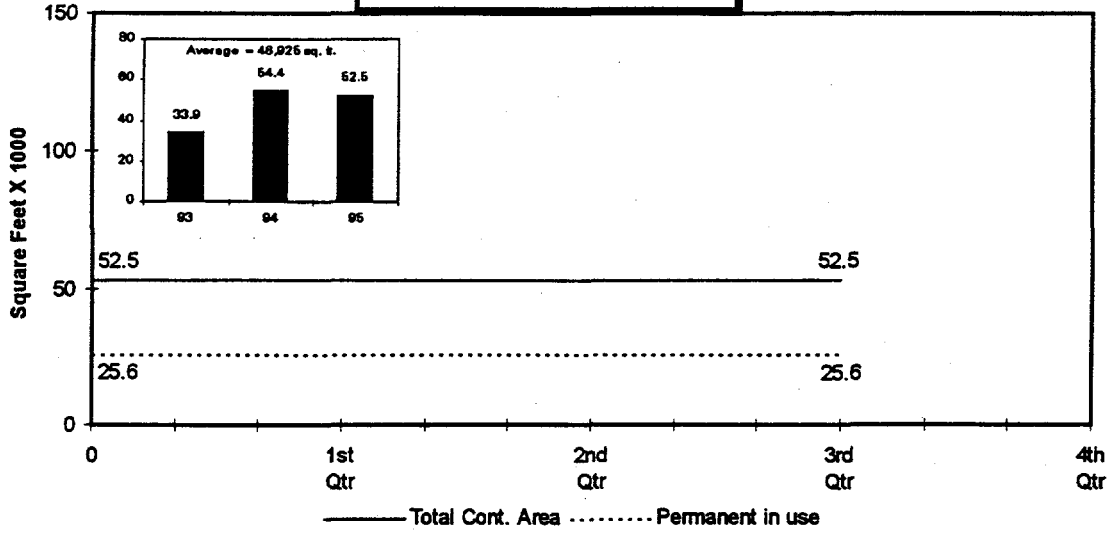
No airborne activity greater than 10 % DAC was detected at the TRA in areas not already posted as Airborne Radioactivity Areas during the third quarter

**TRA CY-96 Year to Date
Radioactive Material Intakes**



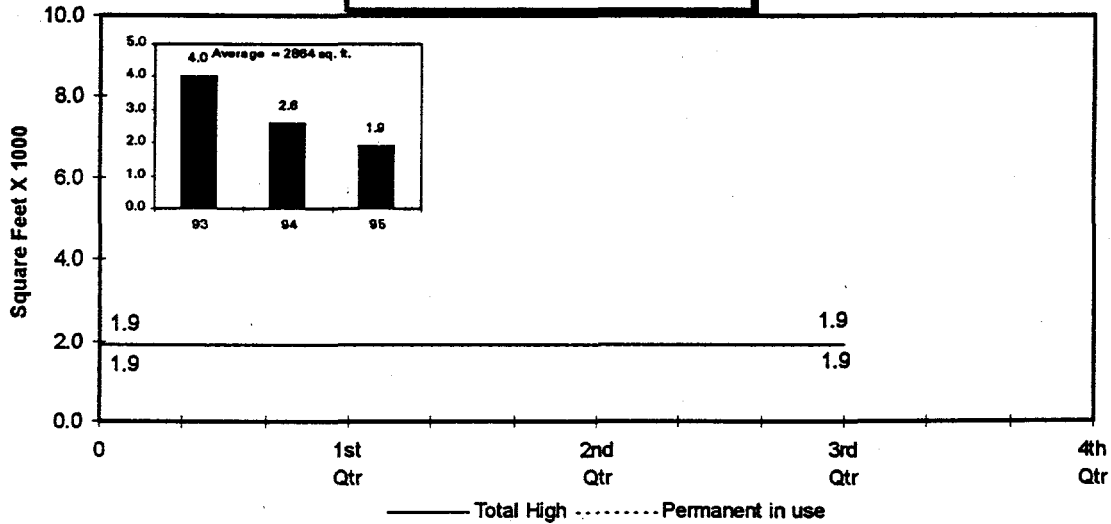
There were no positive bioassays indicating an intake of radioactive material that resulted in a dose assessment of 10 mrem or greater at the TRA during the third quarter.

**TRA CY-96 Year to Date
Contamination Area**



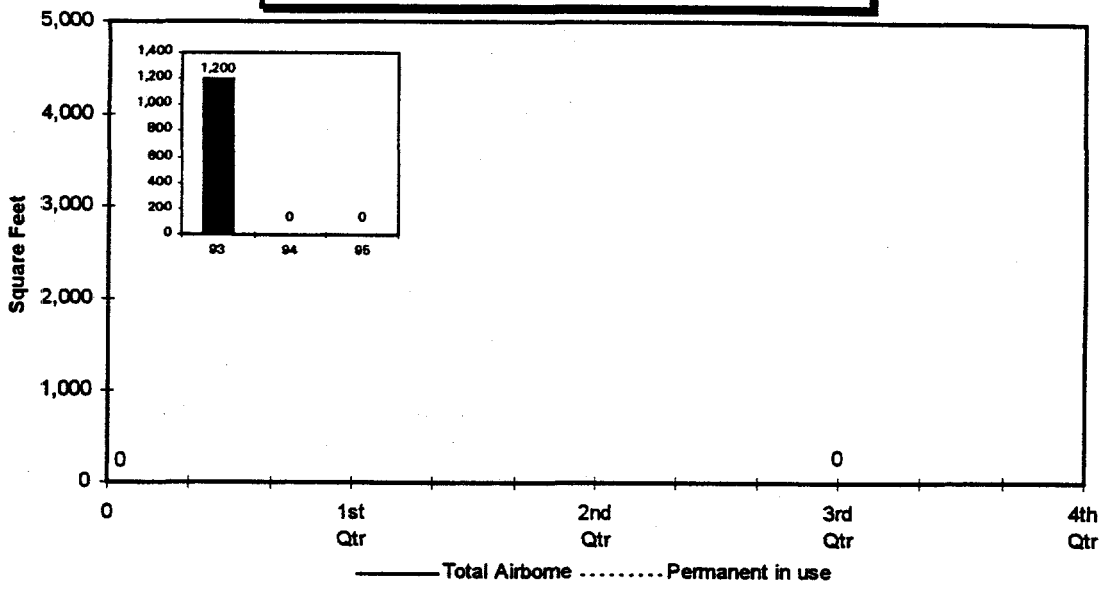
Total Contamination Area for the TRA remained constant through the third quarter at 52,516 square feet. 25,619 square feet is designated as permanent and in-use.

**TRA CY-96 Year to Date
High Contamination Area**



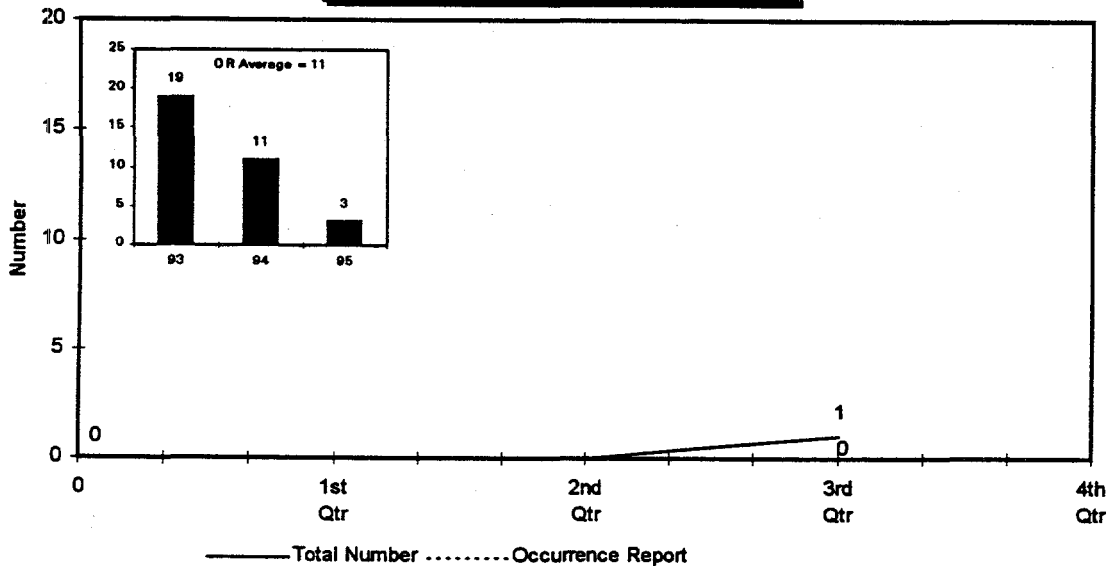
Total High Contamination Area for the TRA at the end of the third quarter was 1,991 square feet. All of this area is designated as permanent and in-use.

TRA CY-96 Airborne Radioactivity Area



Total Airborne Radioactivity Area at the TRA at the end of the third quarter was zero square feet.

TRA CY-96 Year to Date Spills



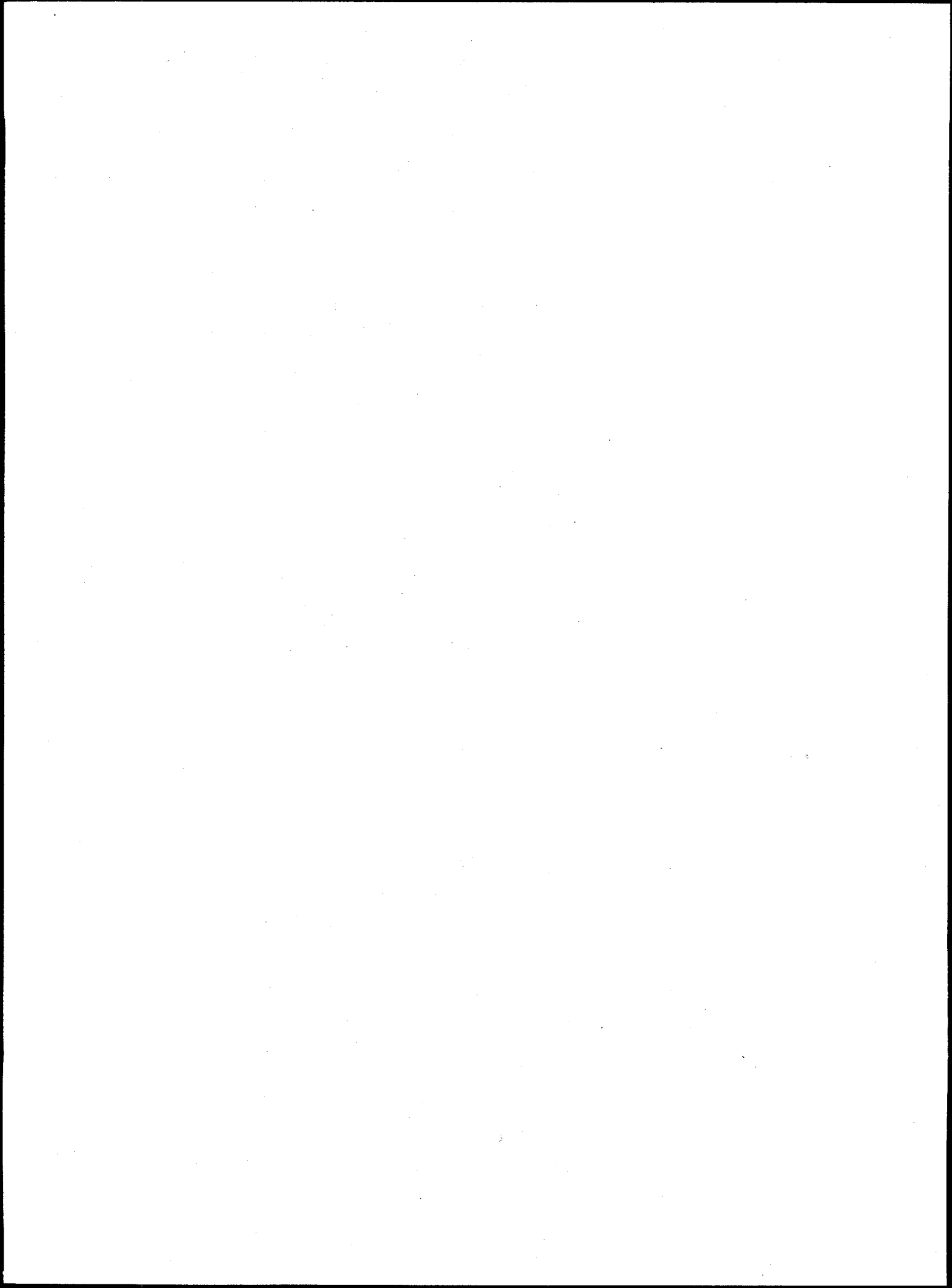
There was one non reportable spill or loss of control of radioactive material at the TRA during the third quarter.

Test Area North

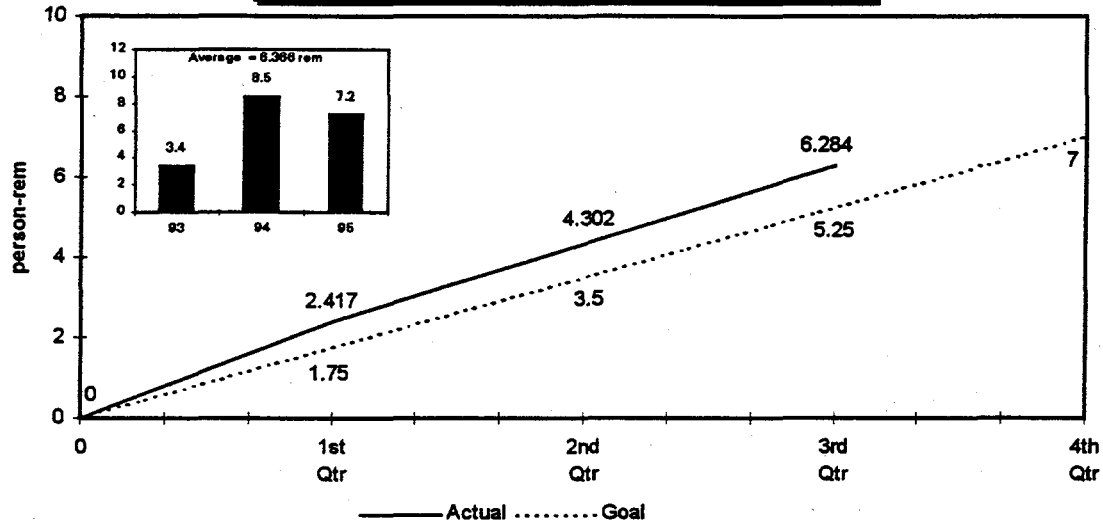
Specific Manufacturing Capability

TAN hot cell decontamination and filter change out, handling and shipment preparation of DRCT fuel assembly containers, cask disassembly, V tank inspections, routine armor manufacturing and routine activities account for the dose contribution at TAN/SMC.

There are 10 indications of positive bioassay currently undergoing evaluation for dose assessment. These will not be included in the charts until they are validated.

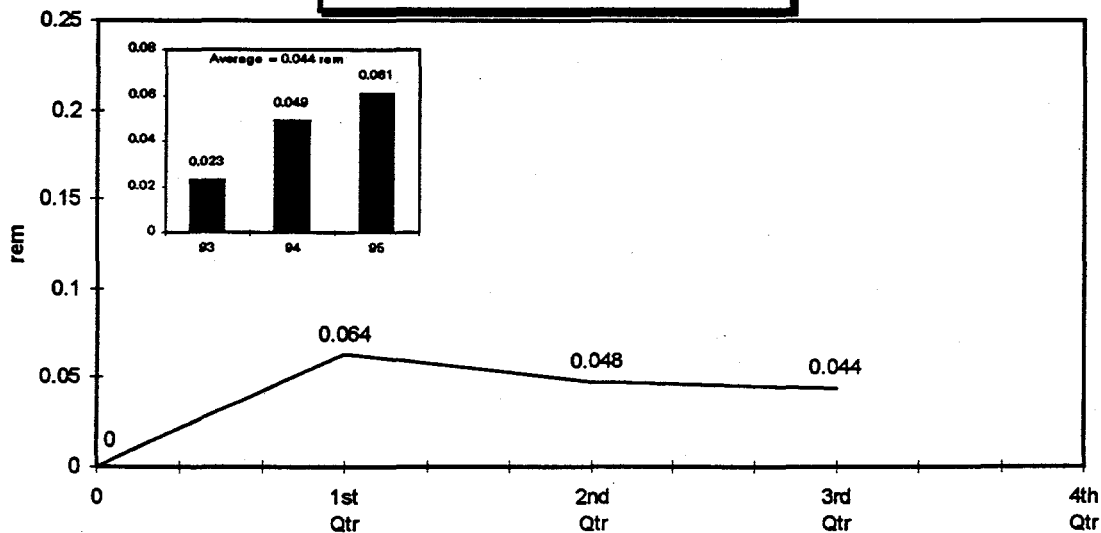


**TAN/SMC CY-96 Collective Year to Date
Penetrating Radiation Dose**



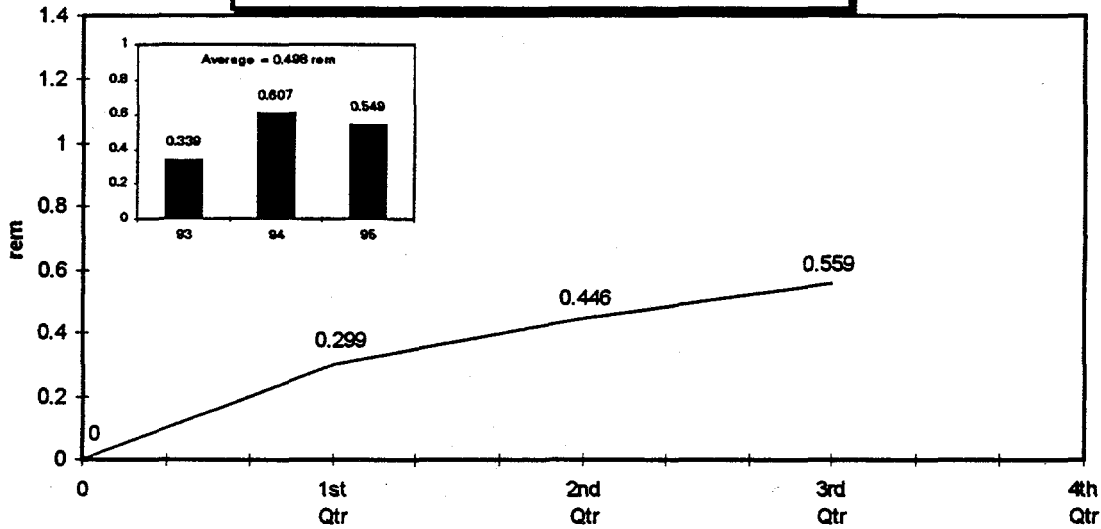
TAN and SMC collective penetrating radiation dose through the end of the third quarter was 6.284 person-rem.

**TAN/SMC CY-96 Year to Date
Average Worker Dose**



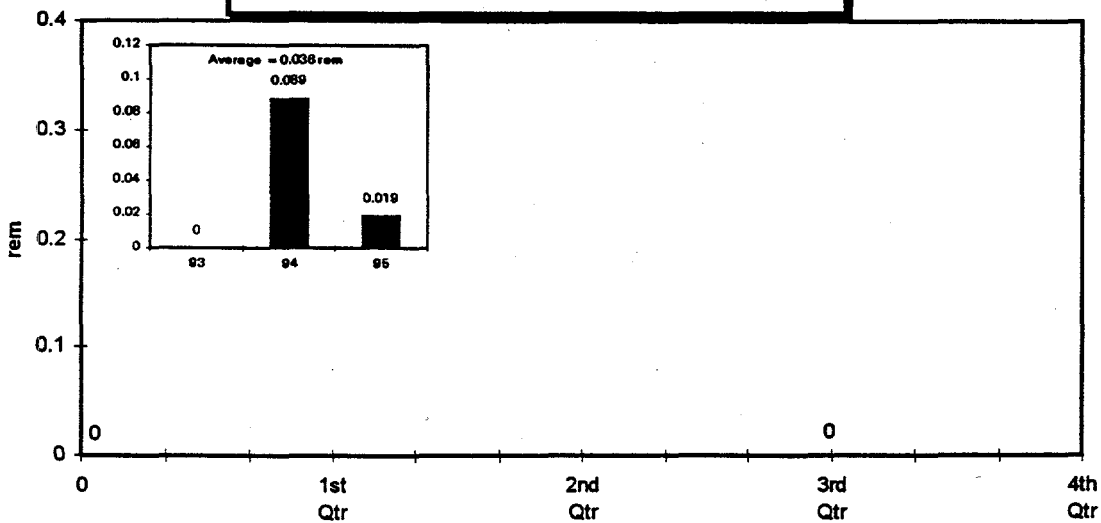
The average worker dose at the TAN/SMC through the end of the third quarter was 0.044 rem.

TAN/SMC CY-96 Maximum Year to Date Penetrating Dose to a Worker



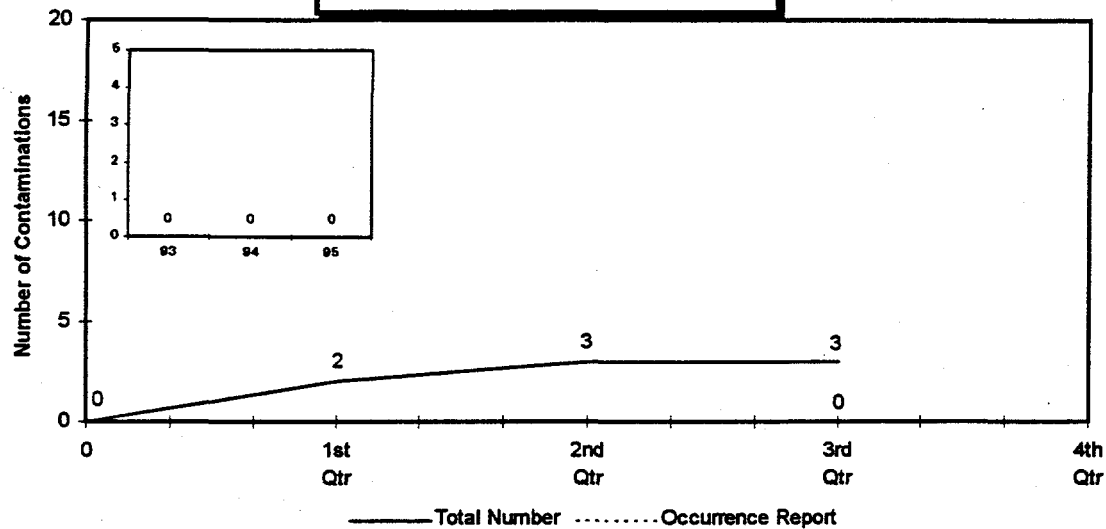
The year to date maximum penetrating radiation dose to a worker through the end of the third quarter at TAN/SMC was 0.559 rem.

TAN/SMC CY-96 Maximum Year to Date Neutron Dose to a Worker



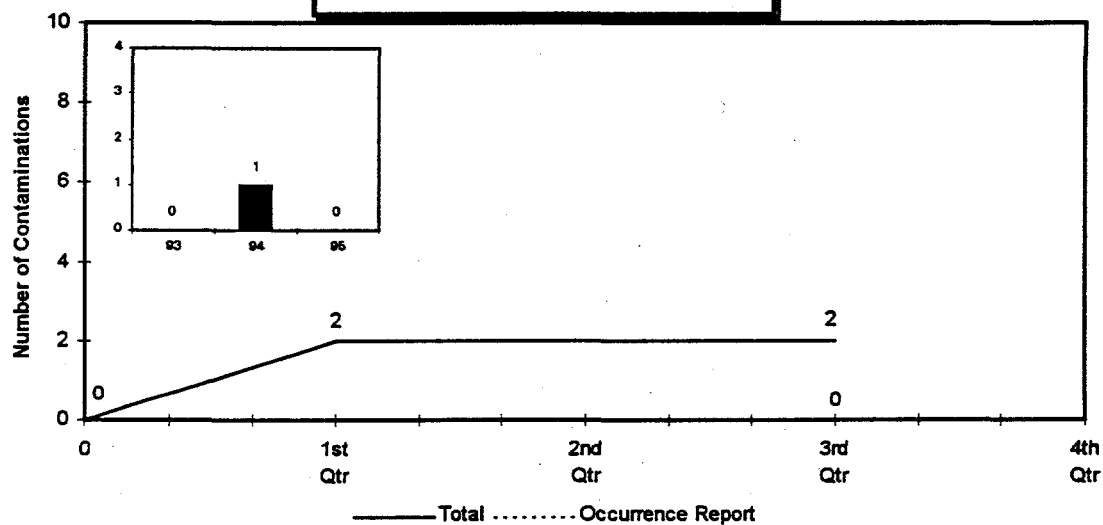
The TAN/SMC maximum neutron dose to a worker through the end of the third quarter was zero rem.

**TAN/SMC CY-96 Year to Date
Skin Contaminations**



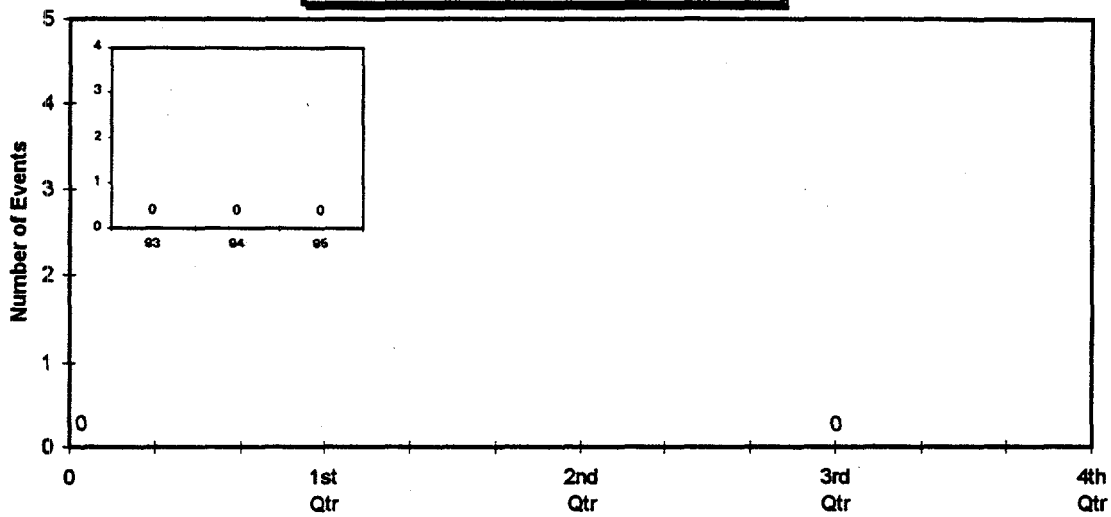
There were no additional skin contaminations at TAN/SMC through the end of the third quarter. No facial contaminations or contaminated wounds occurred during the quarter.

**TAN/SMC CY-96 Year to Date
Clothing Contaminations**



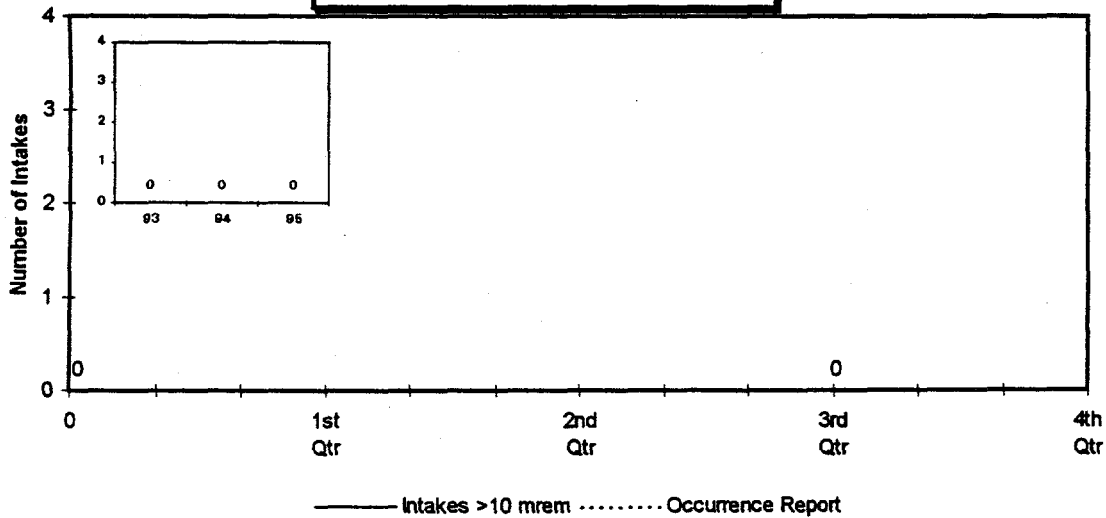
No additional clothing contaminations have occurred at TAN/SMC during the third quarter.

**TAN/SMC CY-96 Year to Date
Airborne Radioactivity Events**



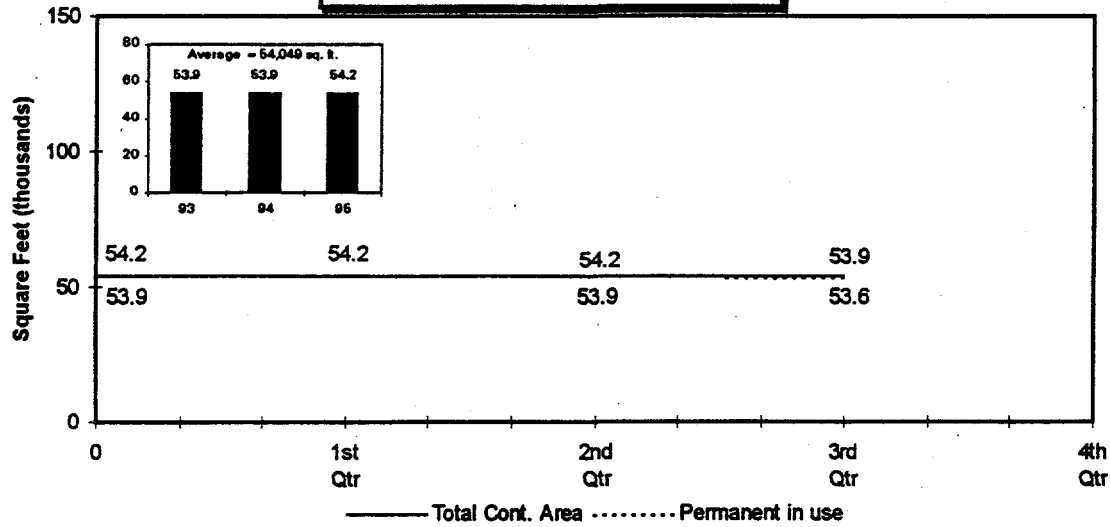
No airborne activity event greater than 10 % DAC was detected at TAN/SMC in areas not posted as Airborne Radioactivity Areas during the third quarter.

**TAN/SMC CY-96 Year to Date
Radioactive Material Intakes**



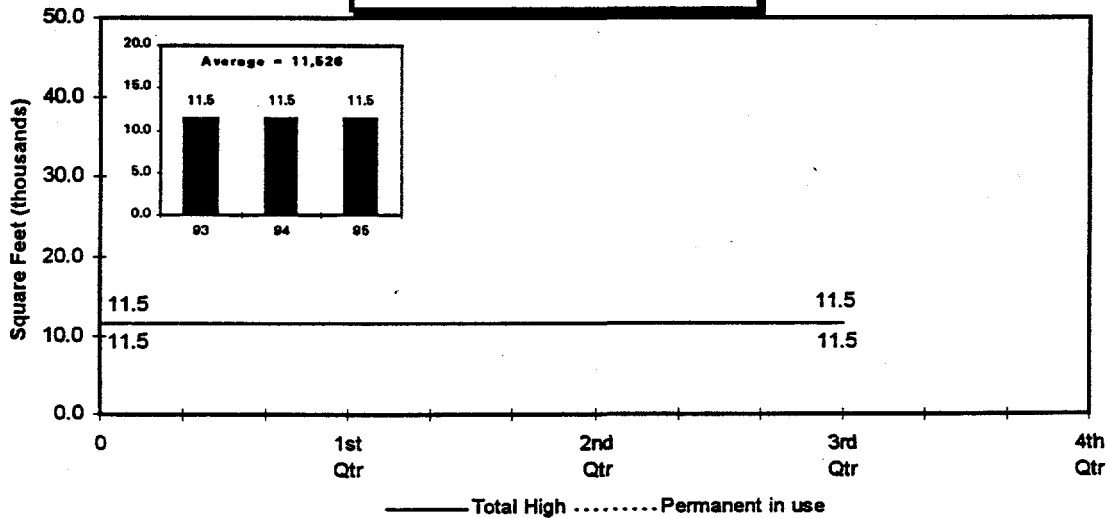
There were no positive bioassays indicating intakes of radioactive material that were verified to have been 10 mrem or greater at TAN/SMC during the third quarter.

TAN/SMC CY-96 Year to Date Contamination Area



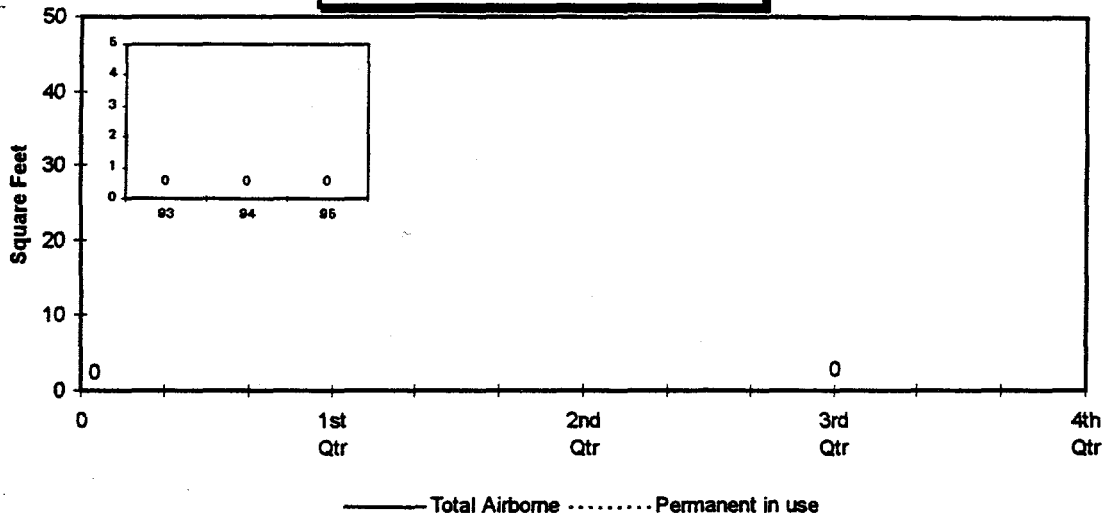
The total Contamination Area at TAN/SMC at the end of the third quarter was 53,949 square feet. 53,649 square feet was designated as permanent and in-use.

TAN/SMC CY-96 High Contamination Area



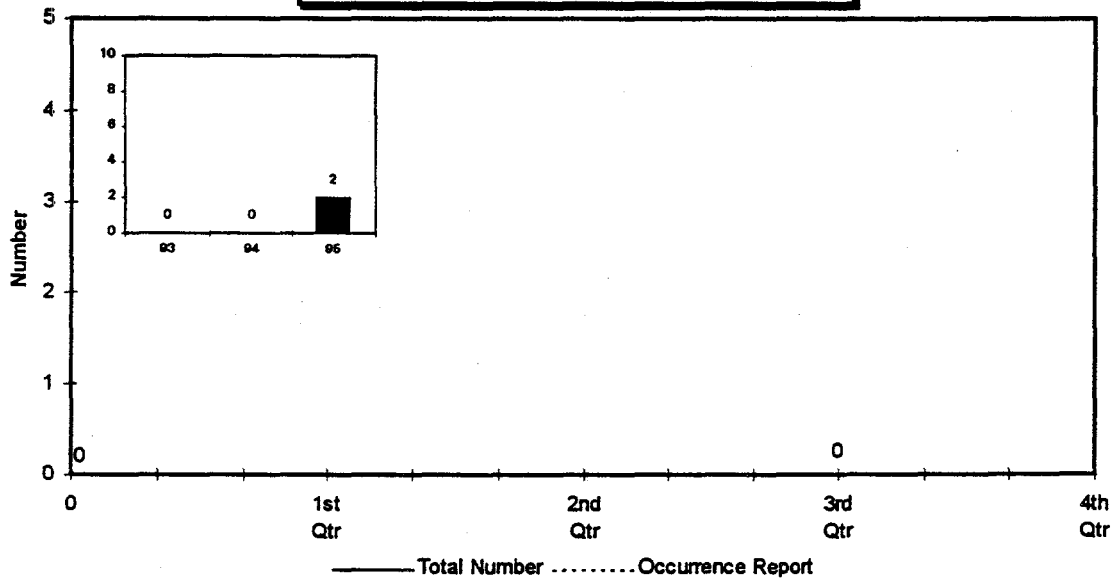
The total High Contamination Area at TAN/SMC at the end of the third quarter was 11,526 square feet. All of this area was designated as permanent and in-use.

**TAN/SMC CY-96
Airborne Radioactivity Area**



Total Airborne Radioactivity Area at TAN/SMC was zero through the end of the third quarter.

TAN/SMC CY-96 Year to Date Spills



There were no spills or loss of control of radioactive material at TAN/SMC during the third quarter.