

TMI DOCUMENTS

DOCUMENT NO:

TM-0143

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METROPOLITAN EDISON COMPANY.

Supervisor, Document Control, NRC

753177

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DATA SHEET 5

Surveillance Procedure 1302-3.1
Required Interval - Quarterly
MTX 33.1

WARNING: PRIOR TO PLACING RMS INTER-LOCK DEFEAT SWITCH IN DEFEAT, PERMISSION MUST BE GRANTED BY SHIFT SUPERVISOR/FOREMAN AND ENTRY MUST BE MADE IN CONTROL ROOM LOG.

Procedure Step No.			As Found	As Left
6.5.1.1d	Channel	RML	7	
6.5.1.1e	Background	Scaler	203 CPM	204 CPM
		Ratemeter	200 CPM	200 CPM
		Recorder	200 CPM	200 CPM
6.5.1.2b	Source Reading (Ba-133)	Scaler	128166 CPM	149054 CPM
		Ratemeter	120000 CPM	149200 CPM
		Recorder	130000 CPM	149900 CPM
6.5.1.3a	Corrected Source Readings (Ba-133)	Scaler	127965 CPM	148830 CPM
		Ratemeter	119800 CPM	148500 CPM
		Recorder	129800 CPM	149700 CPM
6.5.1.4a	Original Source Reading (Ba-133) (Table 4)		239245 CPM	
	Original Source Date (Table 4)	2/15/72		
6.5.1.4b	Elapsed Time (t)		85 MO	
6.5.1.4c	Expected Source Reading (Ba-133)		149947 CPM	
		+ 15%	172437 CPM	
		- 15%	127454 CPM	
6.5.1.5a	Corrected scaler source reading within 15% of expected? (Yes/No)		yes	yes
	Ratemeter within one minor division of scaler (Yes/No)		yes	yes
	Recorder within one minor division of scaler (Yes/No)		yes	yes
6.5.1.6a	Required Alert Setpoint (1101-2.1)		800 CPM	
6.5.1.6d	"As Observed" Alert Setpoint		800 CPM	CPM
6.5.1.6a	Required High Alarm Setpoint (1101-2.1)		4.8x10 ⁵ CPM	
6.5.1.6e	"As Observed" High Alarm Setpoint		4.8x10 ⁵ CPM	CPM
6.5.1.6f	"Observed" Alert and High Alarm Setpoints within plus "0", minus "1" minor division or required (Yes/No?)	Alert	yes	yes
		High	yes	yes
		Alarm	yes	yes

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MTX Page No. 82

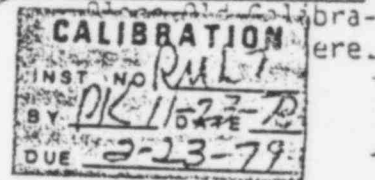
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POOR ORIGINAL

DATA SHEET 5 (Cont.)

6.5.1.6h	"As Found" Alert Setpoint		800 CPM	500 CPM
6.5.1.6h	"As Found" High Alarm Setpoint		4x10 ⁵ CPM	4x10 ⁵ CPM
	"As Found" Alert and High Alarm Setpoints within plus "1", minus "0" minor scale division of required (Yes/No)?	Alert	yes	yes
		High Alarm	yes	yes
6.5.1.7 *	Observed increase in reading due to check source		400 CPM	400 CPM
	Recorder Trace Marked (Yes/No)		yes	
6.5.1.9.1	New calibration sticker attached (Yes/No)		yes	
	Acceptance Criteria: All (Yes/No) blanks indicate yes.			



* See note in text

PERFORMED BY Bonczyk Niant DATE 3/12/79
 APPROVED BY M. F. Fedt DATE 3/12/79
 REMARKS:

POOR ORIGINAL

Surveillance Procedure Exception and Deficiency List

Surveillance Procedure No. 1302-3.1 E Name RMS QTY

Date Data Taken 2-10-79

Date Completed and/or Justified 2-13-79

No.	E/D	Par	Description/Initial/Date	Resolution	Signoff	Date
1	0	6.3.1.5a	RMA 8 IODINE corrected SOURCE READING NOT WITHIN SPEC. WJ 2-10-79 WJZ 2/10/79	CAL AS PER 1302-3.1 APPENDIX A-B + VICTOREEN	RQE	2-13-79
	0	6.3.1.6f	RMA 8 I REQUIRED - OBSERVED SET POINTS NOT IN SPEC WJ 2-10-79 WJZ 2/10/79	CAL AS PER 1302-3.1 A.9.0.	RQE	2-13-79
	0	6.3.1.7a	RMA 8 I AS FOUND SETPOINTS NOT WITHIN SPEC WJ 2-10-79 WJZ 2/10/79	CAL AS PER 1302-3.1 A.9.0.	RQE	2-13-79
	0	6.5.1.5a	RML-6 CORRECTED SOURCE NOT WITHIN SPEC WJ 2-10-79 WJZ 2/10/79	PERFORM APPENDIX A 1302-3.1 AND VICTOREEN	RQE	2-13-79

POOR ORIGINAL

DATA SHEET 2

RADIATION MONITOR SYSTEMS
Surveillance Procedure T302-3.1
Required Interval - Quarterly
MTX 183.1

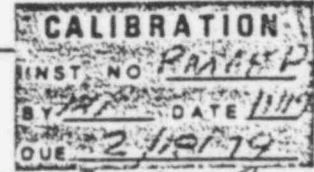
WARNING: PRIOR TO PLACING RMS
INTERLOCK DEFEAT SWITCH IN DEFEAT,
PERMISSION MUST BE GRANTED BY
SHIFT SUPERVISOR/FOREMAN AND
ENTRY MUST BE MADE IN CONTROL
ROOM LOG.

Procedure Step No.			As Found		As Left	
6.2.1.1c	Channel	RMA	8	Part.		
6.2.1.1d	Background	Scaler	32	CPM	32	CPM
		Ratemeter	35	CPM	35	CPM
		Recorder	35	CPM	35	CPM
6.2.1.2b	Source Reading (137 Cs)	Scaler	1609	CPM	1609	CPM
		Ratemeter	1600	CPM	1600	CPM
		Recorder	1600	CPM	1600	CPM
6.2.1.3a	Corrected Source Reading (137 Cs)	Scaler	1577	CPM	1577	CPM
		Ratemeter	1565	CPM	1565	CPM
		Recorder	1565	CPM	1565	CPM
6.2.1.4a	Original Source Reading (137 Cs) (Table 4)		2013	CPM		
	Original Source Reading Date (Table 4)		3-18-72			
6.2.1.4b	Elapsed Time (t)		83	MO		
6.2.1.4c	Expected Source Reading (137 Cs)		1715	CPM		
	" " " " + 15%		1972	CPM		
	" " " " - 15%		1458	CPM		
6.2.1.5a	Scaler Corrected Source Reading Within 15% of Expected? (Yes/No)		420		420	
	Ratemeter within one minor division of scaler? (Yes/No)		420		420	
	Recorder within one minor division of scaler? (Yes/No)		420		420	
6.2.1.6a	Required Alert Setpoint (1101-2.1)		8x10 ⁴	CPM	8x10 ⁴	CPM
6.2.1.6d	"As Observed" Alert Setpoint		8x10 ⁴	CPM	8x10 ⁴	CPM
6.2.1.6a	Required High Alarm Setpoint (1101-2.1)		8x10 ⁵	CPM	8x10 ⁵	CPM
6.2.1.6e	"As Observed" High Alarm Setpoint		8x10 ⁵	CPM	8x10 ⁵	CPM
6.2.1.6f	"Observed" Alert and High Setpoint within plus "0", minus "1" minor division of required setpoint? (Yes/No)	Alert	420		420	
		High Alarm	420		420	
6.2.1.6h	"As Found" Alert Setpoint		8x10 ⁴	CPM	8x10 ⁴	CPM
6.2.1.6i	"As Found" High Alarm Setpoint		8x10 ⁵	CPM	8x10 ⁵	CPM
	"As Found" setpoints within plus 1, minus "0" minor division of required? (Yes/No)	Alert	420		420	
		High	420		420	

POOR ORIGINAL

DATA SHEET 2 (Cont.)

6.2.1.7a *	Observed increase in reading due to check source	100 CPM	100 CPM
	Recorder Trace Marked (Yes/No)	440	440
6.2.1.9.1	New calibration sticker attached (Yes/No)	440	440
	Acceptance Criteria: All yes/no blanks indicate yes.	Place old calibration sticker here	



* See note in text

PERFORMED BY W. Yeager DATE 2-19-79
 APPROVED BY W. F. Cook DATE 2-12-79

Note 2	Flow rate	Vacuum
Prior to Cal.	.9	3.0
After Cal	.9	3.0

REMARKS:

POOR ORIGINAL

DATA SHEET 3

RADIATION MONITOR SYSTEMS
Surveillance Procedure 1302-3.1
Required Interval - Quarterly
MTX 183.1

WARNING: PRIOR TO PLACING RMS
INTERLOCK DEFEAT SWITCH TO DEFEAT,
PERMISSION MUST BE GRANTED BY SHIFT
SUPERVISOR/FOREMAN AND LOGGED IN
CONTROL ROOM LOG.

Procedure Step No.			As Found	As Left
6.3.1.1d	Channel	RM-A	8 Iodine	
6.3.1.1e	Background	Scaler	21 CPM	20 CPM
		Ratemeter	25 CPM	20 CPM
		Recorder	25 CPM	20 CPM
6.3.1.2b	Source Reading (^{133}Ba)	Scaler	16091 CPM	18751 CPM
		Ratemeter	16000 CPM	18700 CPM
		Recorder	16000 CPM	18700 CPM
6.3.1.2c	Source Reading (^{137}Cs)	Scaler	2200 CPM	3381 CPM
		Ratemeter	2200 CPM	3400 CPM
		Recorder	2200 CPM	3400 CPM
6.3.1.3a	Corrected Source Reading (^{133}Ba)	Scaler	16070 CPM	18731 CPM
		Ratemeter	15975 CPM	18680 CPM
		Recorder	15975 CPM	18680 CPM
	Corrected Source Reading (^{137}Cs)	Scaler	2179 CPM	3361 CPM
		Ratemeter	2175 CPM	3480 CPM
		Recorder	2175 CPM	3480 CPM
6.3.1.4a	Original Source Reading (^{133}Ba) (Table 4)		33,195 CPM	OK
	Original Source Reading Date (Table 4)		3-13-72	
6.3.1.4b	Elapsed Time (t)		83 MO	
6.3.1.4c	Expected Source Reading (^{133}Ba)		19,553 CPM	
6.3.1.5a	Expected Source Reading + 15%		22416 CPM	OK
	" " " - 15%		16620 CPM	
	5% of Original Source Reading		1660 CPM	
	15% of Original Source Reading		4979 CPM	
	Corrected Scaler Reading Within 15% of Expected Source Reading? (Yes/No)		No	Yes
	5% ^{133}Ba < ^{137}Cs Scaler Reading < 15% ^{133}Ba (Yes/No)		Yes	Yes
	Panel Meter Within One Minor Division of Scaler? (Yes/No)		Yes	Yes
	Recorder Within One Minor Division of Scaler? (Yes/No)		Yes	Yes

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DATA SHEET 3 (Cont.)

6.3.1.6a	Required Alert Setpoint (1101-2.1)		6.0×10^3 CPM	X
	Required High Alarm Setpoint (1101-2.1)		6×10^4 CPM	
6.3.1.6d	"As Observed" Alert Setpoint		3.1×10^3 CPM	6×10^3 CPM
	"As Observed" High Alarm Setpoint		3.1×10^4 CPM	
D2 6.3.1.6f	"Observed" Setpoints within plus 0, minus 1 minor division of required setpoint? (Yes/No)	Alert	NO	Yes Yes
		High		
		Alarm	NO	Yes
6.3.1.6h	"As Found" Alert Setpoint		3.1×10^3 CPM	6×10^3 CPM
6.3.1.6i	"As Found" High Alarm Setpoint		3.1×10^4 CPM	6×10^4 CPM
D3 6.3.1.7a *	"As Found" setpoints within plus 1, minus 0 minor divisions at required setpoint? (Yes/No)	Alert	NO	Yes
		High		
		Alarm	NO	Yes
Observed increase in reading due to check source.			50 CPM	50 CPM
Recorder Trace Marked (Yes/No)			Yes	Yes
6.3.1.9.1	New calibration sticker applied? (Yes/No)		NO	Yes
	(Acceptance Criteria: All Yes/No blanks indicate yes.)			

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CALIBRATION	
INST NO. <u>711A-21</u>	
BY <u>WJ</u>	DATE <u>1/15</u>
DUE <u>2/19/79</u>	

* See Note in Text

PERFORMED BY W. Yeager DATE 2-10-79

APPROVED BY W. F. Gools DATE 2-12-79

REMARKS:

POOR ORIGINAL

DATA SHEET 4

RADIATION MONITOR SYSTEMS
Surveillance Procedure 1302-3.1
Required Interval - Quarterly
MTX 183.1

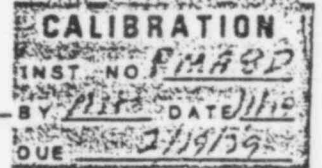
WARNING: PRIOR TO PLACING RMS INTER-LOCK DEFEAT SWITCH IN DEFEAT, PERMISSION MUST BE GRANTED BY SHIFT SUPERVISOR/FOREMAN AND ENTRY MUST BE MADE IN CONTROL ROOM LOG.

Procedure Step No.			As Found	As Left
6.4.1.1d	Channel	RMA	8 GAS	
6.4.1.1e	Background	Scaler	117 CPM	117 CPM
		Ratemeter	110 CPM	110 CPM
		Recorder	110 CPM	110 CPM
6.4.1.2c	Source Reading (^{137}Cs)	Scaler	2624 CPM	2624 CPM
		Ratemeter	2600 CPM	2600 CPM
		Recorder	2600 CPM	2600 CPM
6.4.1.3a	Corrected Source Reading (^{137}Cs)	Scaler	2507 CPM	2507 CPM
		Ratemeter	2490 CPM	2490 CPM
		Recorder	2490 CPM	2490 CPM
6.4.1.4a	Original Source Reading (^{137}Cs) (Table 4)		3130 CPM	ok
	Original Source Reading Date (Table 4)		3-2-72	
6.4.1.4b	Elapsed Time (t)		83 MO	
6.4.1.4c	Expected Source Reading (^{137}Cs)		2667 CPM	
	" " " " + 15%		3067 CPM	
	" " " " - 15%		2267 CPM	
6.4.1.5a	Scaler Corrected Source Reading Within 15% of expected? (Yes/No)		Yes	Yes
	Ratemeter within one minor division of scaler? (Yes/No)		Yes	Yes
	Recorder within one minor division of scaler? (Yes/No)		Yes	Yes
6.4.1.6a	Required Alert Setpoint (1101-2.1)		2×10^3 CPM	
6.4.1.6d	"As Observed" Alert Setpoint		2×10^3 CPM	2×10^3 CPM
6.4.1.6a	Required High Alarm Setpoint (1101-2.1)		2×10^4 CPM	
6.4.1.6e	"As Observed" High Alarm Setpoint		2×10^4 CPM	2×10^4 CPM
6.4.1.6f	"Observed" Alert and high setpoint within plus "0", minus "1" minor division of required setpoint? (Yes/No)	Alert	Yes	Yes
		High Alarm	Yes	Yes

POOR ORIGINAL

DATA SHEET 4 (Cont.)

6.4.1.6h	"As Found" Alert Setpoint		2×10^3	CPM	2×10^3	CPM
6.4.1.6i	"As Found" High Alarm Setpoint		2×10^4	CPM	2×10^4	CPM
	"As Found" set points within plus 1, minus "0" minor division of required? (Yes/No)	Alert	420		420	
		High	420		420	
		Alarm	420		420	
6.4.1.7a *	Observed increase in reading due to check source		150	CPM	150	CPM
	Recorder Trace Marked (Yes/No)		Yes		Yes	
6.4.1.9 1	New calibration sticker attached (Yes/No)		Yes		Yes	
	Acceptance Criteria: All yes/no blanks indicate yes.	Place old calibration sticker here				



* See note in text

PERFORMED BY W. Geason

DATE 2-10-79

APPROVED BY M. F. Tesh

DATE 2-12-79

REMARKS:

POOR ORIGINAL

Surveillance Procedure Exception and Deficiency List

Surveillance Procedure No. 1302-3.1 Name RMS Quarterly A-6

Date Data Taken 2/7/79

Date Completed and/or Justified 2-9-79

No.	E/D	Par	Description/Initial/Date	Resolution	Signoff	Date
1.	D	6.2.1.5a	<p>part Scalar not within 15% of expected value Jff 2/7/79 WLB Jodie 2/7/79</p>	<p>Appendix to 1302-3.1 AU adj.</p>	RQG	2-9-79
-	D	6.3.1.7a	<p>High set point not within one minor division Jff 2/7/79 WLB 2/7/79</p>	<p>Adjust per 1302-3.1</p>	RQG	2-9-79

POOR ORIGINAL

DATA SHEET 2

RADIATION MONITOR SYSTEMS
Surveillance Procedure 1302-3.1
Required Interval - Quarterly
MTX 183.1

WARNING: PRIOR TO PLACING RMS
INTERLOCK DEFEAT SWITCH IN DEFEAT,
PERMISSION MUST BE GRANTED BY
SHIFT SUPERVISOR/FOREMAN AND
ENTRY MUST BE MADE IN CONTROL
ROOM LOG.

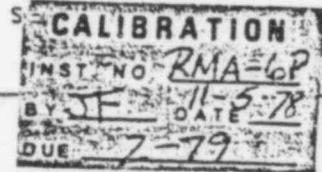
Procedure Step No.			As Found	As Left
6.2.1.1c	Channel	RMA	6 Part.	
6.2.1.1d	Background	Scaler	395 CPM	471 CPM
		Ratemeter	400 CPM	500 CPM
		Recorder	400 CPM	500 CPM
6.2.1.2b	Source Reading (137 Cs)	Scaler	1648 CPM	2253 CPM
		Ratemeter	1650 CPM	2300 CPM
		Recorder	1650 CPM	2300 CPM
6.2.1.3a	Corrected Source Reading (137 Cs)	Scaler	1253 CPM	1812 CPM
		Ratemeter	1250 CPM	1800 CPM
		Recorder	1250 CPM	1800 CPM
6.2.1.4a	Original Source Reading (137 Cs) (Table 4)		2047 CPM	OK
	Original Source Reading Date (Table 4)		2-18-72	
6.2.1.4b	Elapsed Time (t)		83 MO	
6.2.1.4c	Expected Source Reading (137 Cs)		1744 CPM	
	" " " " + 15%		2006 CPM	
	" " " " - 15%		1483 CPM	
6.2.1.5a	Scaler Corrected Source Reading Within 15% of Expected? (Yes/No)		NO	yes
	Ratemeter within one minor division of scaler? (Yes/No)		yes	yes
	Recorder within one minor division of scaler? (Yes/No)		yes	yes
6.2.1.6a	Required Alert Setpoint (1101-2.1)		1.55 x 10 ⁴ CPM	1.55 x 10 ⁴ CPM
6.2.1.6d	"As Observed" Alert Setpoint		1.55 x 10 ⁴ CPM	1.55 x 10 ⁴ CPM
6.2.1.6a	Required High Alarm Setpoint (1101-2.1)		1.24 x 10 ⁵ CPM	1.24 x 10 ⁵ CPM
6.2.1.6e	"As Observed" High Alarm Setpoint		1.24 x 10 ⁵ CPM	1.24 x 10 ⁵ CPM
6.2.1.6f	"Observed" Alert and High Setpoint within plus "0", minus "1" minor division of required setpoint? (Yes/No)	Alert	yes	yes
		High Alarm	yes	yes
6.2.1.6h	"As Found" Alert Setpoint		1.55 x 10 ⁴ CPM	1.55 x 10 ⁴ CPM
6.2.1.6i	"As Found" High Alarm Setpoint		1.24 x 10 ⁵ CPM	1.24 x 10 ⁵ CPM
	"As Found" setpoints within plus 1, minus "0" minor division of required? (Yes/No)	Alert	yes	yes
		High	yes	yes

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DATA SHEET 2 (Cont.)

6.2.1.7a *	Observed increase in reading due to check source	300 CPM	300 CPM
	Recorder Trace Marked (Yes/No)	yes	yes
6.2.1.9.1	New calibration sticker attached (Yes/No)	no	yes
	Acceptance Criteria: All yes/no blanks indicate yes.	Place old calibration	



* See note in text

PERFORMED BY M. Soren / J. Fra DATE 2/2/79
 APPROVED BY JMF DATE 2-9-79

Note 2	Flow rate	Vacuum
Prior to Cal.	1.5	2.5
After Cal	1.5	2.5

REMARKS:

POOR ORIGINAL

DATA SHEET 3

RADIATION MONITOR SYSTEMS
Surveillance Procedure 1302-3.1
Required Interval - Quarterly
MTX 183.1

WARNING: PRIOR TO PLACING RMS
INTERLOCK DEFEAT SWITCH TO DEFEAT,
PERMISSION MUST BE GRANTED BY SHIFT
SUPERVISOR/FOREMAN AND LOGGED IN
CONTROL ROOM LOG.

Procedure Step No.			As Found	As Left
6.3.1.1c	Channel	RM-A	Iodine	
6.3.1.1e	Background	Scaler	65 CPM	65 CPM
		Ratemeter	70 CPM	70 CPM
		Recorder	70 CPM	70 CPM
6.3.1.2b	Source Reading (^{133}Ba)	Scaler	26575 CPM	26575 CPM
		Ratemeter	26600 CPM	26600 CPM
		Recorder	26600 CPM	26600 CPM
6.3.1.2c	Source Reading (^{137}Cs)	Scaler	4056 CPM	4056 CPM
		Ratemeter	4000 CPM	4000 CPM
		Recorder	4000 CPM	4000 CPM
6.3.1.3a	Corrected Source Reading (^{133}Ba)	Scaler	26510 CPM	26510 CPM
		Ratemeter	26530 CPM	26530 CPM
		Recorder	26530 CPM	26530 CPM
	Corrected Source Reading (^{137}Cs)	Scaler	3991 CPM	3991 CPM
		Ratemeter	3930 CPM	3930 CPM
		Recorder	3930 CPM	3930 CPM
6.3.1.4a	Original Source Reading (^{133}Ba) (Table 4)		39233 CPM	OK
	Original Source Reading Date (Table 4)		2-9-72	
6.3.1.4b	Elapsed Time (t)		83 MO	
6.3.1.4c	Expected Source Reading (^{133}Ba)		23110 CPM	OK
6.3.1.5a	Expected Source Reading + 15%		26576 CPM	
	" " " - 15%		19643 CPM	
	5% of Original Source Reading		1962 CPM	OK
	15% of Original Source Reading		5881 CPM	
	Corrected Scaler Reading Within 15% of Expected Source Reading? (Yes/No)		yes	
	5% ^{133}Ba < ^{137}Cs Scaler Reading < 15% ^{133}Ba (Yes/No) .35267		yes	yes
	Panel Meter Within One Minor Division of Scaler? (Yes/No)		yes	yes
	Recorder Within One Minor Division of Scaler? (Yes/No)		yes	yes

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POOR ORIGINAL

DATA SHEET 3 (Cont.)

6.3.1.6a	Required Alert Setpoint (1101-2.1)		1100 CPM	XXXX
	Required High Alarm Setpoint (1101-2.1)		8800 CPM	XXXX
6.3.1.6d	"As Observed" Alert Setpoint		1100 CPM	1100 CPM
	"As Observed" High Alarm Setpoint		8800 CPM	8800 CPM
6.3.1.6f	"Observed" Setpoints within plus 0, minus 1 minor division of required setpoint? (Yes/No)	Alert	yes	yes
		High Alarm	yes	yes
6.3.1.6h	"As Found" Alert Setpoint		1100 CPM	1100 CPM
6.3.1.6i	"As Found" High Alarm Setpoint		10000 CPM	8800 CPM
6.3.1.7a *	"As Found" setpoints within plus 1, minus 0 minor divisions at required setpoint? (Yes/No)	Alert	yes	yes
		High Alarm	NO	yes
	Observed increase in reading due to check source.		600 CPM	600 CPM
	Recorder Trace Marked (Yes/No)		yes	yes
6.3.1.9.1	New calibration sticker applied? (Yes/No)		yes	yes
	(Acceptance Criteria: All Yes/No blanks indicate yes.)			

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place old calibration sticker here.

CALIBRATION
INST NO RMA-6T
BY JF DATE 11-5-78
DUE 2-4-79

* See Note in Text

PERFORMED BY A. Jones / J. E. DATE 2/7/79
 APPROVED BY M. F. Eade DATE 2-9-79

REMARKS:

POOR ORIGINAL

DATA SHEET 4

RADIATION MONITOR SYSTEMS
Surveillance Procedure 1302-3.1
Required Interval - Quarterly
MTX 183.1

WARNING: PRIOR TO PLACING RMS INTER-LOCK DEFEAT SWITCH IN DEFEAT, PERMISSION MUST BE GRANTED BY SHIFT SUPERVISOR/FOREMAN AND ENTRY MUST BE MADE IN CONTROL ROOM LOG.

Procedure Step No.			As Found	As Left
6.4.1.1d	Channel	RMA	6 GAS	
6.4.1.1e	Background	Scaler	129 CPM	129 CPM
		Ratemeter	130 CPM	130 CPM
		Recorder	130 CPM	130 CPM
6.4.1.2c	Source Reading (^{137}Cs)	Scaler	2874 CPM	2874 CPM
		Ratemeter	2900 CPM	2900 CPM
		Recorder	2900 CPM	2900 CPM
6.4.1.3a	Corrected Source Reading (^{137}Cs)	Scaler	2745 CRM	2745 CPM
		Ratemeter	2770 CPM	2770 CPM
		Recorder	2770 CPM	2770 CPM
6.4.1.4a	Original Source Reading (^{137}Cs) (Table 4)		3158 CPM	OK
	Original Source Reading Date (Table 4)		2-5-72	
6.4.1.4b	Elapsed Time (t)		83 MO	
6.4.1.4c	Expected Source Reading (^{137}Cs)		2691 CPM	
	" " " " + 15%		3094 CPM	
	" " " " - 15%		2287 CPM	
6.4.1.5a	Scaler Corrected Source Reading Within 15% of expected? (Yes/No)		yes	yes
	Ratemeter within one minor division of scaler? (Yes/No)		yes	yes
	Recorder within one minor division of scaler? (Yes/No)		yes	yes
6.4.1.6a	Required Alert Setpoint (1101-2.1)		600 CPM	
6.4.1.6d	"As Observed" Alert Setpoint		600 CPM	600 CPM
6.4.1.6a	Required High Alarm Setpoint (1101-2.1)		4500 CPM	
6.4.1.6e	"As Observed" High Alarm Setpoint		4500 CPM	4500 CPM
6.4.1.6f	"Observed" Alert and high setpoint within plus "0", minus "1" minor division of required setpoint? (Yes/No)	Alert	yes	yes
		High Alarm	yes	yes

POOR ORIGINAL

DATA SHEET 4 (Cont.)

6.4.1.6h	"As Found" Alert Setpoint	600 CPM	600 CPM
6.4.1.6i	"As Found" High Alarm Setpoint	4500 CPM	4500 CPM
	"As Found" setpoints within plus 1, minus "0" minor division of required? (Yes/No)	Alert High Alarm	yes yes yes
6.4.1.7a *	Observed increase in reading due to check source	200 CPM	200 CPM
	Recorder Trace Marked (Yes/No)	yes	yes
6.4.1.9.1	New calibration sticker attached (Yes/No)	yes	yes
	Acceptance Criteria: All yes/no blanks indicate yes.		



* See note in text

PERFORMED BY M. J. [Signature]

DATE 2/7/79

APPROVED BY M. F. [Signature]

DATE 2-9-79

REMARKS:

POOR ORIGINAL

DATA SHEET 2

RADIATION MONITOR SYSTEMS
Surveillance Procedure T302-3.1
Required Interval - Quarterly
MTX 183.1

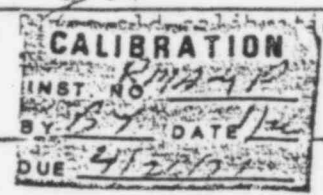
WARNING: PRIOR TO PLACING RMS
INTERLOCK DEFEAT SWITCH IN DEFEAT,
PERMISSION MUST BE GRANTED BY
SHIFT SUPERVISOR/FOREMAN AND
ENTRY MUST BE MADE IN CONTROL
ROOM LOG.

Procedure Step No.			As Found	As
6.2.1.1c	Channel	RMA 4	Part.	
6.2.1.1d	Background	Scaler	308 CPM	
		Ratemeter	300 CPM	
		Recorder	310 CPM	
6.2.1.2b	Source Reading (137 Cs)	Scaler	2110 CPM	
		Ratemeter	2100 CPM	
		Recorder	2110 CPM	
6.2.1.3a	Corrected Source Reading (137 Cs)	Scaler	1802 CPM	
		Ratemeter	1800 CPM	
		Recorder	1800 CPM	
6.2.1.4a	Original Source Reading (137 Cs) (Table 4)		2327 CPM	ES = .236 360 184914
	Original Source Reading Date (Table 4)		3/9/72	
6.2.1.4b	Elapsed Time (t)		85 MO	
6.2.1.4c	Expected Source Reading (137 Cs)		1976 CPM	
	" " " " + 15%		2272 CPM	
	" " " " - 15%		1690 CPM	
6.2.1.5a	Scaler Corrected Source Reading Within 15% of Expected? (Yes/No)		yes	
	Ratemeter within one minor division of scaler? (Yes/No)		yes	
	Recorder within one minor division of scaler? (Yes/No)		yes	
6.2.1.6a	Required Alert Setpoint (1101-2.1)		4.14 x 10 ⁷ CPM	
6.2.1.6d	"As Observed" Alert Setpoint		4.1 x 10 ⁷ CPM	
6.2.1.6a	Required High Alarm Setpoint (1101-2.1)		3.31 x 10 ⁵ CPM	
6.2.1.6e	"As Observed" High Alarm Setpoint		3.3 x 10 ⁵ CPM	
6.2.1.6f	"Observed" Alert and High Setpoint within plus "0", minus "1" minor division of required setpoint? (Yes/No)	Alert	yes	
		High Alarm	yes	
6.2.1.6h	"As Found" Alert Setpoint		4.1 x 10 ⁷ CPM	
6.2.1.6i	"As Found" High Alarm Setpoint		3.31 x 10 ⁵ CPM	
	"As Found" setpoints within plus 1, minus "0" minor division of required? (Yes/No)	Alert	yes	
		High	yes	

POOR ORIGINAL

DATA SHEET 2 (Cont.)

6.2.1.7a *	Observed increase in reading due to check source	250 CPM	CPM
	Recorder Trace Marked (Yes/No)	yes	
6.2.1.9.1	New calibration sticker attached (Yes/No)	yes	
	Acceptance Criteria: All yes/no blanks indicate yes.		



* See note in text

PERFORMED BY C Vincent DATE 5/5/79
 APPROVED BY M F Cool DATE 5/6/79

Note 2	Flow rate	Vacuum
Prior to Cal.	.09	1.25
After Cal	.04	1.25

REMARKS:

POOR ORIGINAL

753195

DATA SHEET 3

RADIATION MONITOR SYSTEMS
Surveillance Procedure 1302-3.1
Required Interval - Quarterly
MTX 183.1

WARNING: PRIOR TO PLACING RMS
INTERLOCK DEFEAT SWITCH TO DEFEAT,
PERMISSION MUST BE GRANTED BY SHIFT
SUPERVISOR/FOREMAN AND LOGGED IN
CONTROL ROOM LOG.

Procedure Step No.			As Found	As Left
6.3.1.1d	Channel	RM-A 4	Iodine	
6.3.1.1e	Background	Scaler	99.6 CPM	54.2 CF
		Ratemeter	100 CPM	60 CF
		Recorder	100 CPM	60 CF
6.3.1.2b	Source Reading (^{133}Ba)	Scaler	28311 CPM	22687 CF
		Ratemeter	30000 CPM	22000 CF
		Recorder	30,000 CPM	22500 CF
6.3.1.2c	Source Reading (^{137}Cs)	Scaler	3767 CPM	4050 CF
		Ratemeter	3900 CPM	4100 CF
		Recorder	3900 CPM	4100 CF
6.3.1.3a	Corrected Source Reading (^{133}Ba)	Scaler	28241.4 CPM	22633 CF
		Ratemeter	29900 CPM	22080 CF
		Recorder	29900 CPM	22000 CF
	Corrected Source Reading (^{137}Cs)	Scaler	3664.4 CPM	3996 CF
		Ratemeter	3800 CPM	4000 CF
		Recorder	3800 CPM	4000 CF
6.3.1.4a	Original Source Reading (^{133}Ba) (Table 4)		35,753 CPM	85 = .67 126 1.6265
	Original Source Reading Date (Table 4)		3/10/72	
6.3.1.4b	Elapsed Time (t)		85 MO	
6.3.1.4c	Expected Source Reading (^{133}Ba)	20828	22395 CPM	
6.3.1.5a	Expected Source Reading + 15%	24052	25754 CPM	
	" " " - 15%	17704	19036 CPM	
	5% of Original Source Reading		1788 CPM	
	15% of Original Source Reading		5363 CPM	
	Corrected Scaler Reading Within 15% of Expected Source Reading? (Yes/No)		No	Yes
01	5% ^{133}Ba < ^{137}Cs Scaler Reading < 15% ^{133}Ba (Yes/No)	.87914	Yes	Yes
	Panel Meter Within One Minor Division of Scaler? (Yes/No)		Yes	Yes
	Recorder Within One Minor Division of Scaler? (Yes/No)		Yes	Yes

POOR ORIGINAL

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DATA SHEET 3 (Cont.)

6.3.1.6a	Required Alert Setpoint (1101-2.1)		2.43x10 ³ CPM	
	Required High Alarm Setpoint (1101-2.1)		2.35x10 ⁴ CPM	
6.3.1.6d	"As Observed" Alert Setpoint		2.92x10 ³ CPM	2.91x10 ³ CPM
	"As Observed" High Alarm Setpoint		2.32x10 ⁴ CPM	2.31x10 ⁴ CPM
6.3.1.6f	"Observed" Setpoints within plus 0, minus 1 minor division of required setpoint? (Yes/No)	Alert	yes	yes
		High Alarm	yes	Yes
D 6.3.1.6h	"As Found" Alert Setpoint		4000 CPM	2900 CPM
6.3.1.6i	"As Found" High Alarm Setpoint		2.3x10 ⁴ CPM	2.2x10 ⁴ CPM
6.3.1.7a *	"As Found" setpoints within plus 1, minus 0 minor divisions at required setpoint? (Yes/No)	Alert	NO	yes
		High Alarm	yes	Yes
	Observed increase in reading due to check source.		400 CPM	400 CPM
	Recorder Trace Marked (Yes/No)		yes	yes
6.3.1.9.1	New calibration sticker applied? (Yes/No)		NO	yes
	(Acceptance Criteria: All Yes/No blanks indicate yes.)			

CALIBRATION
INST. NO. RMA-4I
BY JF/MS DATE 1-27-79
DUE 4-27-79

* See Note in Text

PERFORMED BY Dick Jones DATE 5-1-79

APPROVED BY [Signature] DATE 5/6/79

REMARKS:

POOR ORIGINAL

DATA SHEET 4

RADIATION MONITOR SYSTEMS
Surveillance Procedure 1302-3.1
Required Interval - Quarterly
MTX 183.1

WARNING: PRIOR TO PLACING RMS INTER-
LOCK DEFEAT SWITCH IN DEFEAT, PERMISSION
MUST BE GRANTED BY SHIFT SUPERVISOR/
FOREMAN AND ENTRY MUST BE MADE IN CONTROL
ROOM LOG.

Procedure Step No.		As Found	As Left
6.4.1.1d	Channel	RMA 4 GAS	
6.4.1.1e	Background	Scaler 47.8 CPM	CPM
		Ratemeter 50 CPM	CPM
		Recorder 50 CPM	CPM
6.4.1.2c	Source Reading (^{137}Cs)	Scaler 2518 CPM	CPM
		Ratemeter 2700 CPM	CPM
		Recorder 2500 CPM	CPM
6.4.1.3a	Corrected Source Reading (^{137}Cs)	Scaler 2518 CPM	CPM
		Ratemeter 2400 CPM	CPM
		Recorder 2500 CPM	CPM
6.4.1.4a	Original Source Reading (^{137}Cs) (Table 4)	2995 CPM	$\frac{55}{360} = .236$ $.84914$
	Original Source Reading Date (Table 4)	3/9/72	
6.4.1.4b	Elapsed Time (t)	85 MO	
6.4.1.4c	Expected Source Reading (^{137}Cs)	2543 CPM	
	" " " " + 15%	2935 CPM	
	" " " " - 15%	2162 CPM	
6.4.1.5a	Scaler Corrected Source Reading Within 15% of expected? (Yes/No)	Yes	
	Ratemeter within one minor division of scaler? (Yes/No)	Yes	
	Recorder within one minor division of scaler? (Yes/No)	Yes	
6.4.1.6a	Required Alert Setpoint (1101-2.1)	1.5×10^3 CPM	
6.4.1.6d	"As Observed" Alert Setpoint	1.5×10^3 CPM	CPM
6.4.1.6a	Required High Alarm Setpoint (1101-2.1)	1.2×10^4 CPM	
6.4.1.6e	"As Observed" High Alarm Setpoint	1.2×10^4 CPM	CPM
6.4.1.6f	"Observed" Alert and high setpoint within plus "0", minus "1" minor division of required setpoint? (Yes/No)	Alert Yes	
		High Alarm Yes	

POOR ORIGINAL

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DATA SHEET 4 (Cont.)

6.4.1.6h	"As Found" Alert Setpoint		1.5x10 ³	CPM	CPM
6.4.1.6i	"As Found" High Alarm Setpoint		1.2x10 ³	CPM	CPM
	"As Found" setpoints within plus 1, minus "0" minor division of required? (Yes/No)	Alert High Alarm	yes		
6.4.1.7a *	Observed increase in reading due to check source		160	CPM	CPM
	Recorder Trace Marked (Yes/No)		yes		
6.4.1.9.1	New calibration sticker attached (Yes/No)		yes		
	Acceptance Criteria: All yes/no blanks indicate yes.		yes		

CALIBRATION
INST. NO. RMA-42
BY MS/JE DATE 1-28-79
DUE 4-28-79

* See note in text

PERFORMED BY Bill Gauntlett
Bill Bonzwick

DATE 5/6/79

APPROVED BY M. J. Fed.

DATE 5/6/79

REMARKS:

POOR ORIGINAL

DATA SHEET 5

Surveillance Procedure 1302-3.1
Required Interval - Quarterly
MTX 183.1

WARNING: PRIOR TO PLACING RMS INTER-LOCK DEFEAT SWITCH IN DEFEAT, PERMISSION MUST BE GRANTED BY SHIFT SUPERVISOR/FOREMAN AND ENTRY MUST BE MADE IN CONTROL ROOM LOG.

Procedure Step No.			As Found	As Le
6.5.1.1d	Channel	RML		
6.5.1.1e	Background	Scaler	6567 CPM	CF
		Ratemeter	2000 CPM	CF
		Recorder	2000 CPM	CF
6.5.1.2b	Source Reading (Ba-133)	Scaler	160365 CPM	CF
		Ratemeter	160000 CPM	CF
		Recorder	160000 CPM	CF
6.5.1.3a	Corrected Source Readings (Ba-133)	Scaler	153388 CPM	CF
		Ratemeter	153000 CPM	CF
		Recorder	153000 CPM	CF
6.5.1.4a	Original Source Reading (Ba-133) (Table 4)		254,041 CPM	85 = 167 126 162639
	Original Source Date (Table 4)		3/13/72	
6.5.1.4b	Elapsed Time (t)		85 MO	
6.5.1.4c	Expected Source Reading (Ba-133)		154,129 CPM	126 162639
	" " " " + 15%		172,949 CPM	
	" " " " - 15%		135,259 CPM	
6.5.1.5a	Corrected scaler source reading within 15% of expected? (Yes/No)		yes	
	Ratemeter within one minor division of scaler (Yes/No)		yes	
	Recorder within one minor division of scaler (Yes/No)		yes	
6.5.1.6a	Required Alert Setpoint (1101-2.1)		600 CPM	
6.5.1.6d	"As Observed" Alert Setpoint		600 CPM	CPM
6.5.1.6a	Required High Alarm Setpoint (1101-2.1)		3000 CPM	
6.5.1.6e	"As Observed" High Alarm Setpoint		3000 CPM	CPM
6.5.1.6f	"Observed" Alert and High Alarm Setpoints within plus "0", minus "1" minor division of required (Yes/No?)	Alert	yes	
		High Alarm	yes	

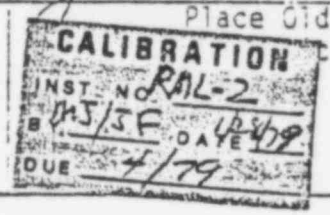
POOR ORIGINAL

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DATA SHEET 5 (Cont.)

6.5.1.6h	"As Found" Alert Setpoint		600 CPM
6.5.1.6i	"As Found" High Alarm Setpoint		3000 CPM
	"As Found" Alert and High Alarm Setpoints within plus "1", minus "0" minor scale division of required (Yes/No)?	Alert	yes
		High Alarm	yes
6.5.1.7 *	Observed increase in reading due to check source		1000 CPM
	Recorder Trace Marked (Yes/No)		yes
6.5.1.9.1	New calibration sticker attached (Yes/No)		yes
	Acceptance Criteria: All (Yes/No) blanks indicate yes.		



* See note in text

PERFORMED BY W. D. Bonney DATE 5/4/79
 APPROVED BY M. F. G. [Signature] DATE 5/6/79
 REMARKS:

POOR ORIGINAL

Surveillance Procedure Exception and Deficiency List

Surveillance Procedure No. 1302-3.1 Name RMS QUARTLEY RIMAYI

Date Data Taken 5/5/79

Date Completed and/or Justified: 5-7-79

No.	E/D	Par	Description/Initial/Date	Resolution	Signoff	Date
1	D	6.3.1.54	SCALAX NOT WITHIN EXPECTED COUNT. WIB 5/5/79	Cal Per Procedure	RAG	5-7-79
2	D	6.3.1.72	ALARM NOT PER 1101-2.17B022.1 Procedures WIB 5/5/79	Cal Per Procedure	RAG	5-7-79

POOR ORIGINAL

DATA SHEET 2

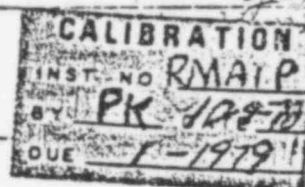
RADIATION MONITOR SYSTEMS
Surveillance Procedure 1302-3.1
Required Interval - Quarterly
MTX 183.1

WARNING: PRIOR TO PLACING RMS
INTERLOCK DEFEAT SWITCH IN DEFEAT,
PERMISSION MUST BE GRANTED BY
SHIFT SUPERVISOR/FOREMAN AND
ENTRY MUST BE MADE IN CONTROL
ROOM LOG.

Procedure Step No.			As Found	As Left
6.2.1.1c	Channel	IRMA 1		
6.2.1.1d	Background	Scaler	49 CPM	49 CPM
		Ratemeter	50 CPM	50 CPM
		Recorder	52 CPM	52 CPM
6.2.1.2b	Source Reading (137 Cs)	Scaler	2524 CPM	2524 CPM
		Ratemeter	2550 CPM	2550 CPM
		Recorder	2600 CPM	2400 CPM
6.2.1.3a	Corrected Source Reading (137 Cs)	Scaler	2475 CPM	2475 CPM
		Ratemeter	2500 CPM	2500 CPM
		Recorder	2548 CPM	2548 CPM
6.2.1.4a	Original Source Reading (137 Cs) (Table 4)		2664 CPM	X
	Original Source Reading Date (Table 4)		7-18-72	
6.2.1.4b	Elapsed Time (t)		82 NO	
6.2.1.4c	Expected Source Reading (137 Cs)		2276 CPM	
	" " " " + 15%		2618 CPM	
	" " " " - 15%		1935 CPM	
6.2.1.5a	Scaler Corrected Source Reading Within 15% of Expected? (Yes/No)		Yes	Yes
	Ratemeter within one minor division of scaler? (Yes/No)		Yes	Yes
	Recorder within one minor division of scaler? (Yes/No)		Yes	Yes
6.2.1.6a	Required Alert Setpoint (1101-2.1)		2000 CPM	2000
6.2.1.6d	"As Observed" Alert Setpoint		2000 CPM	2000
6.2.1.6a	Required High Alarm Setpoint (1101-2.1)		4000 CPM	4000
6.2.1.6b	"As Observed" High Alarm Setpoint		4000 CPM	4000
6.2.1.6f	"Observed" Alert and High Setpoint within plus "0", minus "1" minor division of required setpoint? (Yes/No)	Alert High Alarm	Yes	Yes
6.2.1.6h	"As Found" Alert Setpoint		2000 CPM	2000 CPM
6.2.1.6i	"As Found" High Alarm Setpoint		4000 CPM	4000 CPM
	"As Found" setpoints within plus 1, minus "0" minor division of required? (Yes/No)	Alert High	Yes	Yes

DATA SHEET 2 (Cont.)

6.2.1.7a *	Observed increase in reading due to check source	CPM	300 CPM
	Recorder Trace Marked (Yes/No)		yes
6.2.1.9.1	New calibration sticker attached (Yes/No)		yes
	Acceptance Criteria: All yes/no blanks indicate yes.		



* See note in text

PERFORMED BY Kenn DATE 1-15-79
 APPROVED BY M. F. Cook DATE 1-21-79

Note 2	Flow rate	Vacuum
Prior to Cal.	1.0	4.5
After Cal	1.0	4.5

REMARKS:

POOR ORIGINAL

DATA SHEET 3

RADIATION MONITOR SYSTEMS
Surveillance Procedure 1302-3.1
Required Interval - Quarterly
MTX 183.1

WARNING: PRIOR TO PLACING RMS
INTERLOCK DEFEAT SWITCH TO DEFEAT,
PERMISSION MUST BE GRANTED BY SHIFT
SUPERVISOR/FOREMAN AND LOGGED IN
CONTROL ROOM LOG.

Procedure Step No.			As Found	As Left
6.3.1.1d	Channel	RM-A 1	Iodine	
6.3.1.1e	Background	Scaler	131 CPM	131 CPM
		Ratemeter	130 CPM	130 CPM
		Recorder	125 CPM	125 CPM
6.3.1.2b	Source Reading (^{133}Ba)	Scaler	21,528 CPM	21,528 CPM
		Ratemeter	21,500 CPM	21,500 CPM
		Recorder	21,500 CPM	21,500 CPM
6.3.1.2c	Source Reading (^{137}Cs)	Scaler	3409 CPM	3409 CPM
		Ratemeter	3500 CPM	3500 CPM
		Recorder	3400 CPM	3400 CPM
6.3.1.3a	Corrected Source Reading (^{133}Ba)	Scaler	21,397 CPM	21,397 CPM
		Ratemeter	21,370 CPM	21,370 CPM
		Recorder	21,375 CPM	21,375 CPM
	Corrected Source Reading (^{137}Cs)	Scaler	3278 CPM	3278 CPM
		Ratemeter	3370 CPM	3370 CPM
		Recorder	3275 CPM	3275 CPM
6.3.1.4a	Original Source Reading (^{133}Ba) (Table 4)		34,923 CPM	OK
	Original Source Reading Date (Table 4)		3-10-72	
6.3.1.4b	Elapsed Time (t)		82 MO	
6.3.1.4c	Expected Source Reading (^{133}Ba)		20,689 CPM	
6.3.1.5a	Expected Source Reading + 15%		23,792 CPM	OK
	" " " - 15%		17,586 CPM	
	5% of Original Source Reading		1746 CPM	
	15% of Original Source Reading		5239 CPM	
	Corrected Scaler Reading Within 15% of Expected Source Reading? (Yes/No)		Yes	
	5% ^{133}Ba < ^{137}Cs Scaler Reading < 15% ^{133}Ba (Yes/No)		Yes	
	Panel Meter Within One Minor Division of Scaler? (Yes/No)		Yes	
	Recorder Within One Minor Division of Scaler? (Yes/No)		Yes	

POOR ORIGINAL

MTX Page No. _____

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DATA SHEET 1
RADIATION MONITOR SYSTEMS

POOR ORIGINAL

SURVEILLANCE PROCEDURE 1302-3.1
Required Interval - Quarterly
MTX 183.1

WARNING: PRIOR TO PLACING RMS
INTERLOCK DEFEAT SWITCH IN DE-
FEAT, PERMISSION MUST BE GRANTED
BY SHIFT SUPERVISOR/FOREMAN AND
ENTRY MUST BE MADE IN CONTROL
ROOM LOG.

Procedure Step No.			As Found	As Left
6.1.1.1a.	Channel	RM-G-4		
	FCK Used	Source No. 202 Serial No. 248-2-5		
6.1.1.1b.	Background	Recorder	.9 MR/hr	.9 MR/hr
		Ratemeter	.9 MR/hr	.9 MR/hr
6.1.1.1c.	Source Reading (Closed)	Recorder	32 MR/hr	32 MR/hr
		Ratemeter	35 MR/hr	35 MR/hr
6.1.1.1d.	Source Reading (Intermediate)	Recorder	490 MR/hr	490 MR/hr
		Ratemeter	520 MR/hr	500 MR/hr
6.1.1.1e.	Source Reading (Open)	Recorder	570 MR/hr	4100 MR/hr
		Ratemeter	6000 MR/hr	4570 MR/hr
6.1.3a.	Corrected Source Reading (Closed)	Recorder	11.1 MR/hr	11.1 MR/hr
		Ratemeter	74.1 MR/hr	74.1 MR/hr
6.1.3b.	Corrected Source Reading (Intermediate)	Recorder	489.1 MR/hr	489.1 MR/hr
		Ratemeter	518.1 MR/hr	499.1 MR/hr
6.1.3c.	Corrected Source Reading (Open)	Recorder	5400.1 MR/hr	4099.1 MR/hr
		Ratemeter	U/5999.1 MR/hr	4499.1 MR/hr
6.1.4a.	Original Source Reading (Closed)	(Table 1)	56 MR/hr	
6.1.4a.	Original Source Reading (Intermediate)		530 MR/hr	
	Original Source Reading (Open)		4600 MR/hr	
6.1.4b.	Original Source Reading Date		5-1-76	
	Elapsed Time (t)		32 MO.	
6.1.4c.	Expected Source Reading (Closed)		37.8 MR/hr	
	" " " " + 15%		38.9 MR/hr	
	" " " " - 15%		28.8 MR/hr	
	Expected Source Reading (Intermediate)		498 MR/hr	
	" " " " + 15%		572 MR/hr	
	" " " " - 15%		423 MR/hr	
	Expected Source Reading (Open)		4724 MR/hr	
	" " " " + 15%		4972 MR/hr	
" " " " - 15%		3675 MR/hr		

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POOR ORIGINAL

Surveillance Procedure Exception and Deficiency List

Surveillance Procedure No. 1302-3.1A Name RMS QUARTLEY

Date Data Taken 1/6/79 RMG-3

Date Completed and/or Justified 2-2-79

No.	E/D	Par	Description/Initial/Date	Resolution	Signoff	Date
1	D	6.1.6a	ALARM POINTS NOT AS PER 1101-2.1 1/6/79 Witz 1-8-79	SET ALARMS PER 1302-3.1 APPENDIX TO PARAGR 1101-2.1	RUA	2-2-79
2	D	6.1.5b	FULL OPEN SOURCE READING NOT IN SPEC RMG-10 1-8-79 Witz 1-9-79	PERFORM APPENDIX C, C.2.0, PER 1302-3.1	RUA	2-2-79
3	D	6.1.5b	EXCEEDED CORRECTED READINGS NOT IN SPEC ON ALL POSITIONS RMG-2 1-8-79 Witz 1-8-79	PERFORM APPENDIX C, C.2.0, PER 1302-3.1	RUA	2-2-79
1	D	6.1.5b	CORRECTED FULL OPEN DOES NOT MEET SPEC RMG-3 1-8-79 Witz 1-8-79	PERFORM APPENDIX C, C.2.0, PER 1302-3.1	RUA	2-2-79
-	D	6.1.5b	ALL READINGS CORRECTED NOT IN SPEC RMG-12 1-8-79 Witz 1-8-79	PERFORM APPENDIX C, C.2.0, PER 1302-3.1	RUA	2-2-79
	D	6.1.3c	open reading not in spec RMG-4 1-9-79 Witz 1-9-79	PERFORM APPENDIX C C.2.0 PER 1302-2.1	RUA	2-2-79

DATA SHEET 1
RADIATION MONITOR SYSTEMS

SURVEILLANCE PROCEDURE 1302-3.1
Required Interval - Quarterly
MTX 183.1

WARNING: PRIOR TO PLACING RMS
INTERLOCK DEFEAT SWITCH IN DE-
FEAT, PERMISSION MUST BE GRANTED
BY SHIFT SUPERVISOR/FOREMAN AND
ENTRY MUST BE MADE IN CONTROL
ROOM LOG.

Procedure Step No.		As Found	As Left
6.1.1.1a.	Channel	RM-G- 2	
	FCK Used	Source No. 202	
		Serial No. 448-9-5	
6.1.1.1b.	Background	Recorder .9 MR/hr	.9 MR/hr
		Ratemeter .9 MR/hr	.9 MR/hr
6.1.1.1c.	Source Reading (Closed)	Recorder 30 MR/hr	30 MR/hr
		Ratemeter 30 MR/hr	30 MR/hr
6.1.1.1d.	Source Reading (Inter- mediate)	Recorder 530 MR/hr	530 MR/hr
		Ratemeter 500 MR/hr	500 MR/hr
6.1.1.1e.	Source Reading (Open)	Recorder 3010 MR/hr	4500 MR/hr
		Ratemeter 3300 MR/hr	4500 MR/hr
6.1.3a.	Corrected Source Reading (Closed)	Recorder 291 MR/hr	291 MR/hr
		Ratemeter 291 MR/hr	291 MR/hr
6.1.3b.	Corrected Source Reading (Intermediate)	Recorder 4991 MR/hr	4991 MR/hr
		Ratemeter 4991 MR/hr	4991 MR/hr
6.1.3c.	Corrected Source Reading (Open)	Recorder 32991 MR/hr	44991 MR/hr
		Ratemeter 32991 MR/hr	44991 MR/hr
6.1.4a.	Original Source Reading (Closed) (Table 1)	36 MR/hr	
6.1.4a.	Original Source Reading (Intermediate)	530 MR/hr	
	Original Source Reading (Open)	4600 MR/hr	
	Original Source Reading Date	5-1-76	
6.1.4b.	Elapsed Time (t)	32 MO.	
	Expected Source Reading (Closed)	33.9 MR/hr	
6.1.4c.	" " " " + 15%	38.9 MR/hr	
	" " " " - 15%	29.7 MR/hr	
	Expected Source Reading (Intermediate)	491 MR/hr	
	" " " " + 15%	572 MR/hr	
	" " " " - 15%	423 MR/hr	
	Expected Source Reading (Open)	4324 MR/hr	
	" " " " + 15%	4972 MR/hr	
	" " " " - 15%	3675 MR/hr	

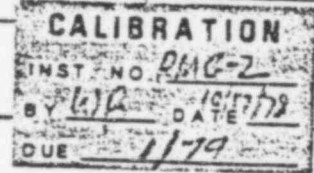
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POOR ORIGINAL

DATA SHEET 1 (Cont.)

D 3	6.1.5b. Corrected Source Reading Within 15% of Expected? Yes/No	Closed	N/O	Yes
		Intermediate	N/O	Yes
		Open	N/O	Yes
	6.1.6a. Required Alert Setpoint (1101-2.1)		1.5 MR/hr	1.5 MR/hr
	Required High Alarm Setpoint (1101-2.1)		2.5 MR/hr	2.5 MR/hr
	6.1.6b. "As Found" Alert Setpoint		1.5 MR/hr	1.5 MR/hr
	6.1.6c. "As Found" High Alarm Setpoint		2.5 MR/hr	2.5 MR/hr
	6.1.6g. "Observed" Alert Setpoint		1.5 MR/hr	1.5 MR/hr
	6.1.6h. "Observed" High Alarm Setpoint		2.5 MR/hr	2.5 MR/hr
	6.1.6i. "Observed" Setpoints Within One Minor Division of Req'd? (Yes/No)	Alert	Yes	Yes
		High Alarm	Yes	Yes
	6.1.7a.* Observed Increase In Reading Due to Check Source		4 MR/hr	4 MR/hr
	** Recorder Trace Marked (Yes/No)		Yes	Yes
	6.1.9.1 New Calibration Sticker Installed? (Yes/No)		Yes	Yes



Acceptance Criteria: All Yes/No Blanks indicate Yes.
* Record "Pegged" if meter pegs high due to background.
** See Note In Text.

PERFORMED BY MW Hochberg DATE 1/9/79
APPROVED BY JMK Feol DATE 1-10-79

Remarks:

POOR ORIGINAL

DATA SHEET 1
RADIATION MONITOR SYSTEMS

SURVEILLANCE PROCEDURE 1302-3.1
Required Interval - Quarterly
MTX 183.1

WARNING: PRIOR TO PLACING RMS
INTERLOCK DEFECT SWITCH IN DE-
FEAT, PERMISSION MUST BE GRANTED
BY SHIFT SUPERVISOR/FOREMAN AND
ENTRY MUST BE MADE IN CONTROL
ROOM LOG.

Procedure Step No.			As Found	As Left
6.1.1.1a.	Channel	RM-G-		
	FCK Used	Source No.	202	
6.1.1.1b.	Background	Recorder	.1 MR/hr	.2 MR/hr
		Ratemeter	.1 MR/hr	.2 MR/hr
6.1.1.1c.	Source Reading (Closed)	Recorder	.25 MR/hr	.35 MR/hr
		Ratemeter	.25 MR/hr	.35 MR/hr
6.1.1.1d.	Source Reading (Intermediate)	Recorder	250 MR/hr	350 MR/hr
		Ratemeter	250 MR/hr	350 MR/hr
6.1.1.1e.	Source Reading (Open)	Recorder	3000 MR/hr	4000 MR/hr
		Ratemeter	3000 MR/hr	4000 MR/hr
6.1.3a.	Corrected Source Reading (Closed)	Recorder	24.9 MR/hr	34.5 MR/hr
		Ratemeter	24.9 MR/hr	34.5 MR/hr
6.1.3b.	Corrected Source Reading (Intermediate)	Recorder	249.9 MR/hr	349.5 MR/hr
		Ratemeter	249.9 MR/hr	349.5 MR/hr
6.1.3c.	Corrected Source Reading (Open)	Recorder	2499.9 MR/hr	3499.5 MR/hr
		Ratemeter	2499.9 MR/hr	3499.5 MR/hr
6.1.4a.	Original Source Reading (Closed)	(Table 1)	36 MR/hr	
6.1.4a.	Original Source Reading (Intermediate)		530 MR/hr	
	Original Source Reading (Open)		4600 MR/hr	
6.1.4b.	Original Source Reading Date		5-1-76	
	Elapsed Time (t)		32 MO.	
6.1.4c.	Expected Source Reading (Closed)		23.8 MR/hr	
	" " " " + 15%		27.4 MR/hr	
	" " " " - 15%		21.1 MR/hr	
	Expected Source Reading (Intermediate)		498 MR/hr	
	" " " " + 15%		572 MR/hr	
	" " " " - 15%		429 MR/hr	
	Expected Source Reading (Open)		4324 MR/hr	
	" " " " + 15%		4972 MR/hr	
" " " " - 15%		3675 MR/hr		

POOR ORIGINAL

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DATA SHEET 4 (Cont.)

6.4.1.6h	"As Found" Alert Setpoint		150	CPM	150	CPM
6.4.1.6i	"As Found" High Alarm Setpoint		300	CPM	300	CPM
	"As Found" setpoints within plus 1, minus "0" minor division of required? (Yes/No)	Alert	yes			
		High Alarm	yes			
6.4.1.7a *	Observed increase in reading due to check source		200	CPM	200	CPM
	Recorder Trace Marked (Yes/No)		yes		yes	
6.4.1.9.1	New calibration sticker attached (Yes/No)		yes		yes	
	Acceptance Criteria: All yes/no blanks indicate yes.		yes			

CALIBRATION
INST NO. MAI-6
BY: [Signature] DATE: 10/10/78
DUE: 11/10/79

* See note in text

PERFORMED BY P. Klem

DATE 1-19-79

APPROVED BY M. F. [Signature]

DATE 1-21-79

REMARKS:

POOR ORIGINAL

DATA SHEET 4

RADIATION MONITOR SYSTEMS
Surveillance Procedure 1302-3.1
Required Interval - Quarterly
MX 103.1

WARNING: PRIOR TO PLACING RMS INTER-
LOCK DEFEAT SWITCH IN DEFEAT, PERMISSION
MUST BE GRANTED BY SHIFT SUPERVISOR/
FOREMAN AND ENTRY MUST BE MADE IN CONTROL
ROOM LOG.

Procedure Step No.			As Found	As Left
6.4.1.1d	Channel	RMA	1 GAS	
6.4.1.1e	Background	Scaler	36 CPM	36 CPM
		Ratemeter	36 CPM	36 CPM
		Recorder	40 CPM	40 CPM
6.4.1.2c	Source Reading (^{137}Cs)	Scaler	2663 CPM	2663 CPM
		Ratemeter	2636 CPM	2636 CPM
		Recorder	2600 CPM	2600 CPM
6.4.1.3a	Corrected Source Reading (^{137}Cs)	Scaler	2627 CPM	2627 CPM
		Ratemeter	2600 CPM	2600 CPM
		Recorder	2560 CPM	2560 CPM
6.4.1.4a	Original Source Reading (^{137}Cs) (Table 4)		2912 CPM	ok
	Original Source Reading Date (Table 4)		3-10-72	
6.4.1.4b	Elapsed Time (t)		82 MO	
6.4.1.4c	Expected Source Reading (^{137}Cs)		2488 CPM	
	" " " " + 15%		2861 CPM	
	" " " " - 15%		2115 CPM	
6.4.1.5a	Scaler Corrected Source Reading within 15% of expected?		yes	yes
	Ratemeter within one minor division of scaler? (Yes/No)		yes	yes
	Recorder within one minor division of scaler? (Yes/No)		yes	yes
6.4.1.6a	Required Alert Setpoint (1101-2.1)		150 CPM	
6.4.1.6d	"As Observed" Alert Setpoint		150 CPM	150 CPM
6.4.1.6a	Required High Alarm Setpoint (1101-2.1)		300 CPM	
6.4.1.6e	"As Observed" High Alarm Setpoint		300 CPM	300 CPM
6.4.1.6f	"Observed" Alert and high setpoint within plus "0", minus "1" minor division of required setpoint? (Yes/No)	Alert	yes	yes
		High Alarm	yes	yes

POOR ORIGINAL

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DATA SHEET 3 (Cont.)

6.3.1.6a	Required Alert Setpoint (1101-2.1)	1500	CPM	
	Required High Alarm Setpoint (1101-2.1)	3000	CPM	
6.3.1.6d	"As Observed" Alert Setpoint	1500	CPM	1500 CPM
	"As Observed" High Alarm Setpoint	3000	CPM	3000 CPM
6.3.1.6f	"Observed" Setpoints within plus 0, minus 1 minor division of required setpoint? (Yes/No)	Alert	Yes	
		High Alarm	Yes	
6.3.1.6h	"As Found" Alert Setpoint	1500	CPM	1500 CPM
6.3.1.6i	"As Found" High Alarm Setpoint	3000	CPM	3000 CPM
6.3.1.7a *	"As Found" setpoints within plus 1, minus 0 minor divisions at required setpoint? (Yes/No)	Alert	Yes	
		High Alarm	Yes	
	Observed increase in reading due to check source.	200	CPM	200 CPM
	Recorder Trace Marked (Yes/No)	Yes		
6.3.1.9.1	New calibration sticker applied? (Yes/No)	Yes		
	(Acceptance Criteria: All Yes/No blanks indicate yes.)			



* See Note in Text

PERFORMED BY D.S. Reuter DATE 1/10/79
 APPROVED BY MA Fork DATE 1-10-79

REMARKS:

POOR ORIGINAL