

# Logbook Analysis (DRAFT)

January 18, 2007

## Attachments 1-5

### Page Key

Attachment 1.....	2
Attachment 2.....	45
Attachment 3.....	48
Attachment 4.....	69
Attachment 5.....	81

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## ATTACHMENT 1: PERSONNEL LOGBOOK ENTRIES

### Logbook Building 771 Fire 1957

This entire logbook contains bioassay data for the individuals involved in this fire. This includes results for blood, sputum, fecal and urine samples.

### Logbook 10/1/57 - 8/26/60 (Kittinger 1957)

12-6-57: Page 9 - Notified [Name] resample at 23% and that weekly incinerator ask samples show 100 fold increases of orally content to level of 60 µg/gram for samples of Oct 28, Nov 4, & 11. Check out reveals possible source to be sweeping from 1<sup>st</sup> floor hall containing ships. Collection of sweepings from stair in mid hall showed count to 15,000. Checks each night this week have shown chips in 2<sup>nd</sup> floor hall. Assigned attention overtime tomorrow

1-29-58: Page 14 - [Name] Reports 169% for latest urine sample from [Name].

1-30-58: Page 15 - Checked with [Name] to see if he had been notified of [Name] sample, he had not, so I informed him of result. I notified [Name] that H.P. would take no further action and make no contact with [Name] except at [Name] at [Name] request. [Name] visited 81 in afternoon to see what action had been taken. He suggested re-sample over weekend and that [Name] and his cloths be monitored before leaving work Friday night.

1-31-58: Page 15 - Made arrangements with [Name] to have [Name] notified of resample & to arrange monitoring.

1-31-58: Page 15 - [Name] called to notify me that [Name] sample of I-28 was 103%. I notified [Name] who called [Name] in immediately- arranged for resample tonight with rigid monitoring of his person- just like [Name].

1-31-58: Page 15 - [Name] & [Name] both monitored thoroughly before leaving. [Name] shorts found with some count. Brought shorts from laundry for him to wear home.

10-3-58: Page 46 - Notified by lab that [Name] urine sample (he had bucket home at time of acid) was 203% MPL. Told [Name] and [Name]- set up resample for at 6.

10-7-58: Page 47 - Notified by [Name], [Name] resample was ~ 25% MPL. I notified [Name] and [Name].

11-3-58: Page 51 - [Name] conferred with me about high air count trend in 233. He agreed to a special sampling program for this room.

11-18-58: Page 53 – [Name's] exchange badge found "hot" (visitor).

11-19-58: Page 53 - Visitor badge # 3 found hot. Both badges destroyed with [Name's] permission by [Name] with [Name] in attendance. Asked [Name] to check pm men's badges, he found 4 > 250 which were taken from the rack.

11-19-58: Page 53 - Asked [Name] to check all badges in the racks during his shift, he found 19 all form 81 > 250. Guards sent these down to H.P.

11-20-58: Page 53 - 5 badges of 19 unable to completely decontam. Got [Name's] permission to destroy. Letter written for [Name's] sign, concerning destroying of 11 exchange badges described above safety meeting- 81 H.P.

1-31-59: Page 64 - [Name's] Badge (permanent F-26) was destroyed because of contamination level.

2-11-59: Page 65 - Destroyed 81...badge for [Name].

2-12-59: Page 65 - Destroyed [Name's] permanent badge

3-26-59: Page 72 - Notified by [Name] that [Name], [Name], [Name], and [Name] neglected to take sample Buckets home. I made arrangements to get spot samples from these people today. [Name] notified that [Name's] second sample of 3-25 was shoot 210dpm/24hr

3-30-59: Page 72 - [Name] reported following results:

[Name] – 11

[Name] -10

[Name] - 12

[Name] – Bkg

[Name] - 210 (evening sample)

4-10-59: Page 74 - Destroyed contamination Exch. Badge- [Name] [Badge].

4-27-59: Page 76 - [Name] began assignment to Bldg 83. Notified by [Name] that [Name] has urine result of 131%- He is to be resampled tonight- [Name] notified – Sample was submitted 4/23.

4-28-59: Page 76 - Notified by [Name] that [Name] has urine result of 50%- I notified [Name].

5-4-59: Page 77 - Spot sample from [Name] submitted at beginning of pm shift with his understanding of the problem and his cooperative assent.

5-5-59: Page 77 - Notified [Name] of spot sample taken from [Name] and discussed extrapolation problem involved in spot sampling.

5-7-59: Page 78 - [Name's] re-sample (spot sample Mon. evening) was reported 20%.

5-8-59: Page 78 - [Name's] sample of 5-7 – 110%.

5-12-59: Page 79 - [Name] reports [Name's] re-sample of 5-8 at 20%.

5-21-59: Page 81 - [Name] notified me that [Name's] tools were found about 1,000 direct after being checked out of 81. These were sent back to 81- No smear count found, direct was confirmed.

[Name] reported: [Name] 5/14 = 70%; [Name] ~ 5/14 = ~ 70%.  
Their supervisor notified these men to resample.

[Name] reported very small Kimwipe fire during 3<sup>rd</sup> shift last night.

5-25-59: Page 82 - [Name's] re-sample of 5-22 reported @ 47% [Name] and [Name] given material for a Safety contract

5-16-59: Page 82 - Burned class waste - guard came down from gate 2 to observe he wrote report. [Name] reported [Name's] sample of 5-21 is 136%.

Spill in labs created slight degrees of hall contamination. [Name] reported at lunchtime that something must have happened since some shoes were found hot. Monitor was sent down and found hot areas plus all lab affected somewhat.

5-28-59: Page 83 – [Name's] resample of 5-27 was 75%

6-3-59: Page 83 - Discussion with [Name], [Name], and [Name] concerning contamination checkout of maintenance personnel. [Name] urine sample of 6-1 at 100% - told [Name].

6-10-59: Page 84 – [Name's] sample of 6-8 reported at 330% MPL. This information relayed to [Name]. Immediate overnight resample requested.

6-15-59: Page 84 - [Name] on loan to 76 for next two weeks. [Name's] overnite sample submitted 6-12-59 was reported at about 70%. Talked to [Name] about sampling needed for “C” contamination parts.

6-19-59: Page 85 - [Name's] Sample of 6/18 Reported at 685%.

6-22-59: Page 85 - [Name's] urine sample at 80%. Destroyed [Name's] permanent badge because of contamination. Notified [Name]. Guard person.

6-23-59: Page 85 - [Name's] resample about 50% - notified [Name] and [Name].

7-20-59: Page 89 – [Name] reported [Name's] sample 6-13 with an ave.1090 dpm and with very erratic results.

8-7-59: Page 93 - [Name] 212 dpm - 240% - notified [Name].

9-9-59: Page 101 – Badges found hot and destroyed:

[Name]	[Badge]	Perm & Exch.
[Name]	[Badge]	Perm & Exch
[Name]	[Badge]	Perm & Exch

Guard [Name] witnessed the badge destruction.

10-5-59: Page 103 – [Name] reported following 83 personnel with high urine results (sample submitted Oct. 1)

[Name]	1300 dpm	1480%
[Name]	217	247%
[Name]	1280	1450
[Name]	305	
[Name]	[illegible]	

10-9-59: Page 104 - [Name] reported resample results (submitted 10-7)

[Name]	273 dpm	310%
[Name]	150 dpm	170%

These people plus [Name] scheduled for resample over the weekend.

10-9-59: Page 104 - [Name] reported [Name] at 99 dpm (103%) report to [Name] (to be resampled)

10-9-59: Page 104 - [Name], [Name], [Name], and I had conference yesterday concerning the high urine counts. They have investigated and find no reason.

10-15-59: Page 105 – [Name] informs me that he consulted [Name] and has his permission to use either film badges on the exchange badge alone for wear in the Bldg. He told me to go ahead and work with [Name] in getting the situation taken care of.

10-16-59: Page 105-106 – [Name] reported at 124 dpm, sample ...

10-27-59: Page 107 – [Name] reminded to submit urine sample. [Name] reminded to submit urine sample.

11-4-59: Page 108 – [Name] reported inadvertent exposure to [Name] letter written to [Name].

11-9-59: Page 108 – New exchange badge system instituted – perm badge not worn in ....

12-2-59: Page 111 – Talked to [Name] re possible use for hand and foot counter (He feels this might create more problems than it would solve.) Also discussed film badge use for 81 –

[Name] doesn't want to use film badges unless absolutely necessary – if other means for personnel exposure are available, he would rather not have to bother with the badges.)

12-18-59: Page 113 – [Name] spot sample after incident in 266 on Dec. 15 was reported at 409% MPL. [Name] sample of Dec. 14, 262%. [Name] sample of Dec. 10, 108%.

12-29-59: Page 115 –

Lab reports [Name] sample of 12-18 @ 128% (113 dpm)

Lab reports [Name] sample of 12-24 @ 82% (73 dpm)

1-5-60: Page 116 – [Name] discovered contamination of a major share of the floors in the backend of 91. [Name] sent down to assist about 10:30. Decontamination took remainder of the day. Recap of events led to fact that [Name] on PM shift 1-4 had opened an ice cream container of sample vials from 76 for shipment. Release of contam. was from this container. A check of [Name] when he came to work this PM showed significant personal contamination carried back in: face - 1500 cpm, hands -1000, pants – 2500, shoes (top only) 500 cpm. His lunch box was ~ 700 cpm and sandwich wrapping about 300 cpm. [Name] was decontam at 91 and med & his pants washed; money watch, wallet, etc. were decontam. His lunch was discarded. His car was checked (only steering wheel was contam. to 300 dpm).

1-7-60: Page 117 – Lab reports [Name] sample of 1-7 (exposure of 12-31 sample collected I-314) at 100 dpm/24 hr – 114%.

1-20-60: Page 118 – Repeat of test in [Name] lab conditions essentially the same – no sign exposure to other personnel.

1-28-60: Page 119 – Lab reported following sign. urine results – all received by lab the week of 1-18-69.

[Name] (Foundry) – 87% (resample 2-1 was 49%)

[Name] (P. Chem) – 99%

[Name] (P. Chem) – 80%

[Name] (P. Chem) – 90%

[Name] (P. Chem) – 57%

[Name] (?) – 58/60%

[Name] (Foundry) – 65? dpm – 72/77%

[Name] (83) – 82%

[Name] (83) – 28%

2-3-60: Page 121 – [Name] sample of 1-22 reported at 117 dpm – 133%.

[Name] resample of 1-28 reported at 119%

[Name] sample of 1-27 reported at 133%

2-5-60: Page 121 – [Name] sample of 1-29 reported at 135%

[Name] sample of 1-28 reported at 90%

[Name] sample of 2-2 reported at 33%.

2-10-60: Page 122 – [Name] sample of 2-8 – 69 dpm – 78%

2-16-60: Page 123 – Lab reported following urine results:

Results returned 2-15:

[Name] – 14 dpm – 16%

[Name] – 33 dpm – 40%

[Name] – 29 dpm – 33%

Resamples & Routine returned:

[Name] – 52 dpm – 59%

[Name] – 237 – 270%

2-17-60: Page 123 – Lab Results:

[Name]	2-8	162 dpm	184%
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[Name]	2-8	80 dpm	91%
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[Name]	2-8	83 dpm	94%
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2-22-60: Page 124 – Lab reports:

[Name] (resample) – 52%

[Name] – 97%

[Name] – 154% (2-19-60)

2-23-60: Page 124 – Met with [Name], [Name], and [Name] to discuss HP position on chronic high urine excretions, such as [Name]. They feel no official HP recommendation to be made until 4 or 5 months repeated overexposures.

2-23-60: Page 124 – Met then with [Name], [Name], [Name] to discuss [Name] urine excretion. They wish to issue a letter to him stating that the condition seem to result from personal habits and asking that he exercise greater care.

2-24-60: Page 124 –

[Name] urine sample of 2-10 24 dpm – 27%

[Name] urine sample of 2-22 53 dpm – 60%

2-26-60: Page 124 – Lab reports:

[Name] sample of 2/26 @ 14 dpm or 15%

[Name], sample of 2/24 @ 70 dpm or 80%

[Name] sample of 2/22 @ 25 dpm or 28%.

3-1-60: Page 126 –

[Name] – urine sample of 2-26 was 14 dpm, 15%

[Name] – urine sample of 3-1 was 79 dpm, 90%.

3-10-60: Page 127 – Lab reported [Name] sample of 3-8 at 399 dpm/ 24 hr – 459%

3-11-60: Page 127 – Lab reported [Name] sample of 3-10 @ 108 dpm/ 24 hr – 123%

Lab reported [Name] sample of 3-10 @ 98 dpm/24 hr – 103%

3-14-60: Page 128 – Lab reported [Name] sample of 3-10 at 86 dpm – 90%?

Lab reported [Name] sample of 3-7 at 157 dpm 178%

3-16-60: Page 129 – Lab reported [Name] at 142 dpm/24 hr – 161% (sample of 3-11)

3-17-60: Page 129 – Lab reports:

[Name], sample of 3-11 at 126 dpm/24 hr – 143%

[Name], sample of 3-11 at 192 dpm/24 hr – 218%

[Name], sample of 3-14 at 10 dpm/24 hr – 11%

[Name], sample of 3-14 at 121 dpm/24 hr – 137%.

3-24-60: Page 130 – Lab reported:

[Name] – 3/14 – 134 dpm/24 hr – 152%

[Name] – 3/21 – 167 dpm/24 hr – 190%

[Name] – 3/21 – All spot samples were Bkgd

3-30-60: Page 130 – Lab reported:

[Name] – 3-24 -140 dpm/24 hr

[Name] – 3-26 – 280 dpm (resample 4-1 was 61 dpm)

[Name] – 3-17 – 106 dpm (resample 4-1 was 18 dpm)

[Name] – 3-17 – 140

4-1-60: Page 131 – Lab reports:

[Name] sample of 3-21 @ 115 dpm/24 hr

[Name] sample of 3-25 @ 160

[Name] sample. 3-28 1<sup>st</sup> 6:30-12:30 @ 104 dpm/24 hr

2<sup>nd</sup> @ 43 ave = 74 dpm/24 hr

3-29 1<sup>st</sup> 6:30 @ 75

3-29 @ 69 ave = 72 dpm/24 hr

[Name] samples after contam accid 3-29-60; 1<sup>st</sup> 3 hr after acid 217 dpm/24 hr

Overnite after accid 57 dpm/24 hr

4-11-60: Page 133 – Lab reports:

[Name] resample of 4-1 was 61 dpm  
[Name] resample of 4-1 was 18 dpm

4-20-60: Page 134 – Lab informs me that [Name] sample of 4-11 was 1<sup>st</sup> sample 30 dpm/ave = 22 dpm/24 hr; 2<sup>nd</sup> sample 14 dpm/ave

4-27-60: Page 135 – Lab reported [Name] samples:  
March 31 Spot samples 1<sup>st</sup> 45 dpm/2<sup>nd</sup> 39/ave 42 dpm  
April 4 Spot samples 1<sup>st</sup> 4 dpm/2<sup>nd</sup> 18/ave 11 dpm  
April 11 Spot samples 1<sup>st</sup> 30/2<sup>nd</sup> 14/ave 22 dpm  
April 18 Spot samples 1<sup>st</sup> 27/2<sup>nd</sup> 28/ave 28 dpm.

4-29-60: Page 135 – Lab reports:

[Name]	4-20	86 dpm/24 hr 78%
[Name]	4-20	124 dpm/24 hr
[Name]	4-20	116 dpm/24 hr 132%
[Name]	4-20	119 dpm/24 hr 135%
[Name]	4-20	65 dpm/24 hr 74%

5-6-60: Page 136 – [Name] reported [Name] and [Name] got extremely hot while removing rolls from 83 mill: 100,000 on face. Nostrils: [Name] 17 & 18 cpm, [Name] 32 & 41 cpm. Inside respirators were 2500 cpm.

7-1-60: Page 143 – [Name] asked for film badge coverage to replace exchange badges.

### **RFP Logbook 8/29/60-6/12/63**

3/2/61, Page 42 – [Name] talked to about 30-40 contractor people in cafeteria – they were offered urine sampling by their choice – [Name] said response seemed good. Further personal contam. problems w constr. Pers. All cleaned up OK.

3/8/61, Page 43 – Took list of people with no urine results for last 2 mo. to lab. Most were sampled but reporting delinquent. Lab however is not re-scheduling people who are high – also is not reporting samples that are not submitted when tagged. Talked to [Name] about problem.

3/8/61, Page 43 – Worked with [Name] on recommending action levels for Oy urine results. Checked calc. Decided to ...100 dpm/24 hr as level indicating allowable lung level; 50 dpm for re-sample and 200 dpm for restriction from exp.

### **RFP Logbook 1962 Logbook Special Samples**

1-2-62: Page 4 - [Name] Mouth and Nasal Swabs

1. Mouth All Pu Low 36.5 c/m

- 2. L Nostril All Pu High 135.66 c/m
- 3. L Nostril All Pu Low blank
- 4. R Nostril All Pu Low 95.24 c/m
- 5. R Nostril All Pu High 1502.99 c/m

1-8-62: Page 7 –

S-18 [Name] 12-9-61

- 1) Skin from wound (spec 1. mg) 10:45 am 31.093 c/m
- 2) Ca 0.3 mg Pu 2.690 c/m

1-30-62: Page 22- [Name]

Skin excision (ca-0.5 mg) 11,298 c/m at 30% Geo.

Page 37: 2-15-62 [Name] [Badge Number]  
 2-14-62 1.3 ug PU  
 179,000 d/m Not Quant. Transferred

3-13-62: Page 49 - S-178 Cadmium Air Sample (12 min 0.5 CFM)  
 Ashed in HO<sub>3</sub> first. Further ashing in muffle furnace.

4-23-62: Page 74 - [Name] Unknown source material  
 P.H.A. shows 85% U<sup>238</sup> - 15% U<sup>234</sup> by activity

Page 102: 7-17-62 Skin excision [Name] [Badge Number]  
 7-16-62 2,794 c/m PU with 4% Am

Page 125 10-9-62 [Name] Special foreign body  
 [Badge Number] Ave. 50 min count 0.34  
 Reported by [Name] by phone to medical 10-9

Page 128 10-15-62 [Name] 10-12-62  
 63,962 c/m .93 µgms  
 Pu 96.9% Run on RIDL 1 minute  
 Am 3.1%

**Log Book W.D. Kittinger/R.M. Vogel**

**Dates: 6-20-63 thru 10-27-67**

9-23-63: Page 5 - They ([Name]) was advised by me and did notify [Name] [Badge Number] of his urine results

11-12-63: Page 7 - [Name] reported at 164 dpm/24hr for 10/3

12-9-63: Page 7 - High urine samples:

[Badge Number] [Name] 11-21 155 dpm/24hrs

[Badge Number] [Name] 11-13 192 (resample 12-11 was 5

12-17-63: Page 7 - Urine sample – [Name] – 12-16 150 dpm/24hr

12-27-63: Page 7 - Urine sample results reported:

[Name] [Badge Number], 12-11, 77 dpm/24hr

[Name] (N/A), 12-11, 120 dpm/24hr

[Name] 12-11, 145 dpm/24hr

[Name] 12-13, 174 dpm/24hr

[Name] 12-13, 166 dpm/24hr

[Name] 12-13, 102 dpm/24hr

1-16-64: Page 8 -

[Name] resample results of 1-3-64 25 dpm/24hr

[Name] resample results of 1-3-64 25 dpm/24hr

[Name] resample results of 1-3-64 25 dpm/24hr

5-12-64: Page 12 - High Urine Results:

[Name] on 5/5 141 dpm/24hr

[Name] 5/6 121 dpm/24hr

2-17-66: Page 78 – Noted a few gamma exposures for Jan. 66 – Pen – 400 to 800 mostly 44 Bldg people.

6-21-66: Page 96 – Gamma alarm evac. At 200 PM. Good test. 72 people w/o film badges.

### **Logbook (1963 – 1968)**

**8/1/63 - 3/18/68**

9/5/63: Page 6 –

[Name] – 18 of 30 urine samples show Americium

Rabbit positive plutonium

U-235 carry through in plutonium analysis

### **Logbook 3/3/64 – 9/4/64**

3-12-64: Page 11 - Leaking bag incident at airlock (0345 hrs) [Name] [Badge Number] and [Name] [Badge Number] were requested to submit urinalysis samples.

3-15-64: Page 14 - [Name] cut finger on lead shield- monitored by [Name] Bkgd

3-20- 64: Page 19 - [Name] special urinalysis request

Film badge racks installed west entrance.

3-30-64: Page 29 - Puncture Wound- [Name] [Badge Number] distal and palm surface 2<sup>nd</sup> finger left hand – bkgd- happened in hand

3-31-64: Page 30 - Urinalysis request for [Name] [Badge Number] due to personnel Contamination from opening waste bags in west. [Name] [Badge Number] Urinalysis Requested Np237 Spill (2 Spills) 99.5 %

4-23-64: Page 53 - Spec. for [Name] [Badge Number] Puncture through dry box glove 76 Bldg initial 60.6 c/m = 0.11 ug 3<sup>rd</sup> 17.9 c/m 0.033 ug. Will return to medical for final 4-24-64.

4-27-64: Page 56 - [Name] received contamination hands from supposedly cleans plastic gloves. Sent to medical for decontamination during lunch time. Back from medical at 1315.

4-30-64: Page 59 - Request special urine sample from [Name], [Name], [Name], [Name], after spill in... 166B\_Am

5/1/64: Page 60 - Requested Special from [Name] for incident on 4-28-64.

6-1-64: Page 82 - Gamma Spect in [Name] [Badge Number] – puncture. Boiler Operator burned left instep with steam. Nurse came down to Bldg. to dress wound.

6-12-64: Page 91 -

7/9/64: Page 110 - [Name] to Medical – 81 incident [Name] – Cut Finger.

7/16/64: Page 115 - Contamination incident at carbon box Rm 153 some time late on PM shift. 6-lab people working in area all contaminated. 1-Man suspected to have left plant possibly contaminated. No address or telephone number. I went to Boulder but I could not locate him.

7/21/64: Page 118 - Gamma spec on [Name] [Badge Number] wound. Had to be excised. Initial count 0.318 micrograms.

### **RFP Logbook 9/8/64-3--26-65**

9-14-64: Page 15 - Possible personnel exposure to [Name] [Badge Number] working under leaking head tanks at batch box

9-22-64: Page 20 - [Name] [Badge Number] needs 2 new picture for his film badge old one 500 cpm.

1-8-65: Page 94 – [Name] [Badge Number] to medical for decontamination due to incident at L. 6.

1-28-65: Page 109 – Incident of electronic techs brining combo into H.P. area. Combo taken out of Rm 114 with contamination to greater than 100,000 c/m. Air hose used to blow out speaker – contamination spread throughout Rm 151. [Name] and [Name] sent to medical for decontamination and given special urine samples. Instruments from area should be monitored before they are brought into the shop. Practice of using air hose to blow dust from area instruments is a bad one, especially in the poorly ventilated shop area.

2/26/65: Page 131 – Exposure incident with [Name] in Rm. 187. Sent to medical for decontamination and to the body counter. Oxide sample and smears taken from the part that exposed him. Part number C-1049-07, A 1251 Part according to [Name] about 5 yrs. old.

### **Logbook 3/26/65 – 10/18/65**

Page 3: 3-30-65 - Incident in rm. 180 on [Name]. Punctured bag containing oxide during canning operation body count requested- results negative special urine sample requested.

Page 31: 5-6-65 - Spill in 199 South and (sand, slog, crucible, lead all H.P. monitor in 71 Bldg. were put on the spill. Contamination extended from south and of 148 & 149 up to the west exit door at 149. [Name] sent to medical for denominator (nose smears & 50 d/m) three monitors hold over 4 hr cover cleanup of contaminated area

Page 31: 5-6-65 - [Name] was sent to medical for decontamination of both hands. After treatment 100,000 c/m still remained. He was sent back to the building and rubber gloves were worn rest of night. A check on [Name] at end of shift still showed 75,000 c/m he was sent home with gloves and instruction on what to do. He is to report to Hp first thing when returning to work.

Page 35: 5-11-65 - [Name] [Badge Number] hands were checked at the start off the shift the bottom were <250 c/m.

Page 51: 6-4-65 - [Name] went to body counter due to incident in Rm 114

Page 59: 6-16-65 - Explosion- in room 153 Box #6 contamination spread over 300 Sq ft. up to and greater than 100,000 c/m. No problems with the contamination other than in room cleaned up immediately by [Name], [Name], [Name], [Name] urine samples requested for above mon.

Page 60: 6-17-65 - [Name] became contaminated while working in Lathe #768 the Inst. Were not working in his area at the time he was checking himself out thinking he was cold. He went into the locker room and ate two sandwiches. A check on [Name] later by monitor found him to be contaminated greater then 100,000 c/m on his hands and face. We checked his lunch bucket it was contaminated up to 25,000 c/m. his lunch was descended to hot waste and bucket decontaminated called [Name] then talked to [Name] about same 2 ...samples were requested also 24 hr urine sample. [Name] was decontaminated at medical- no problems on this.

Page 61: 6-18-65 - Pocket dosimeter on [Name] 100mr for 12 hrs.

Pocket dosimeter- [Name] 200mr/12hr  
[Name] 100mr/12hr

Page 72: 7-2-65 - Called [Name] about film badges being sent to foreman to be put in rack. Suggested that this was his people's job.

Page 76: 7-9-65 - [Name] to body Counter 8:30 Hrs.  
[Name] to body counter 12:30/ hrs

Page 82: 7-19-65 - [Name] found contaminated at first of shift. He was working SR box. Day shift operator's name was obtained from [Name] and [Name]. It was [Name]'s his locker was checked coveralls 1,500 c/m both sleeves 300c/m inside left sleeve, 400cm on locker door. [Name] was called took [Name] and went into [Name] home and checked No contamination was found on checking. Person 30,000 c/m was found on his left arm, 2,00 c/m on right wrist and 3,00 on left shoulder. He was asked to come back to the plant to be decontaminated. 10 gloves were changed 1 glove was washed. 20 ft floor to 8000 c/m

Page 65: 8-6-65 - Lathe 724 contaminated. [Name] contaminated and sent to medical.

Page 103: 8-17-65 - [Name] to body counter  
[Name] to body counter

Page 111: 8-26-65 - [Name] to medical hot hand and 500 c/m to 1000 c/m in his eye

Page 111: 8-26-65 - [Name] became contaminated while workers at R.R [location]. was removed he was sent home with 750c/m on the left side of his face. Face was too tender to do any more scrubbing.

Page 128: 9-21-65 - [Name] [Badge Number] received 2 small nitric acid burns on the back of his left wrist all contaminated removed except 50,000 c/m on burns arm was banged and was sent home. Overnight urine sample requested [Name] was asked to report to medical when he comes in tomorrow night.

Page 130: 9-23-65 - Spotted leak on 114 Fluor, controlled same [Name] & [Name] to medical and body counter called [Name], [Name] and [Name] (wasn't home)  
[Name] and [Name] came out to plant.

Page 135: 9-29-65 - Maint on vaco lines over skull box, rm 149 Contamination was spread. [Name], 1785 sent from medical with 800 c/m on left Eye and 600 c/m on side of nose.

Page 145: 10-8-65 - Contaminated Incident in room 174 and 175 personnel involved [Name] [Badge Number], [Name] [Badge Number], [Name] [Badge Number] to body counter others [Name] [Badge Number], [Name] [Badge Number], [Name] [Badge Number], and [Name] was only one wearing a Resp.

Page 150: 10-14-65 - [Name] [Badge Number] sent home with 2,000 c/m on left hand after he had been to medical.

### **RFP Logbook 10/19/65-5/9/66**

11/6/65: Page 17 – Gamma spec on [Name] [Badge Number] – First Count 20 µg – Final count before sewing up wound 4.6 µg – After sewing up wound 1.96 µg. Puncture wound on furnace #33, 76 Bldg.. Pu sliver on a tantalum funnel punctured him. [Name] called out to perform the excising. Continuous urine samples requested.

11-19-65: Page 28 – [Name] filling waste bag at incinerator the seam split. About 700 to 800 sq. ft. of floor contaminated from 3,000 c/m to 100,000 c/m. [Name] did not have on a respirator when the incident happened. His face was spotty to 30,000 c/m; back of neck to 100,000 c/m under nose. 1,500 c/m nose swipes 126 d/m before washing, 6 d/m after washing. [Name] was completely decontaminated in the building. Head 13-26 to 3,000 c/m (100 pits) are decontaminated.

12-6-65: Page 39 – Talked to [Name] Re [Name] high film badge results.

12-9-65: Page 41 – Site gauge blew off at Tank 731. A pop off was heard at 0045 Hrs., but no one knew what had occurred. About 0345 hrs hot booties were investigated and what had happened was discovered. Air sample A-8 was found to be 35,000 cpm. [Name] and [Name] issued special urine samples.

12-29-65: Page 57 – [Name] and [Name] went to medical at the end of PM shift for decontamination.

2-16-66: Page 93 – [Name] requested body count for [Name] [Badge Number]. Counted at 1130 on 2-16-66.

2-16-66: Page 93 – [Name] and [Name] came out at quitting time (~1615) from 147 B & C with up to 6,000 c/m on their hands and personal clothing. Both rooms checked OK, with the exception of the telephone 300 c/m. Desks were locked. Clothing Decontaminated.

2-24-66: Page 99 – K2 pressurized during MTC operations when a PV was being raised into K-1. Floor – ceiling and chem. Line contaminated. MTC Man [Name] [Badge Number] contaminated over most of his body. Released from medical with 2,000 c/m on his back and neck and 400 c/m on left side of face, chest, lower stomach, and R. knee. He was wearing a respirator at the time.

### **RFP Logbook 5/10/66-12/3/66**

6/16/66: Page 27 – Rm. 148 – 0100 Fire and Pressurization of K-1 contamination confined immediate area. 250 sq. ft.. B-16 head 10K c/m direct. Possible exposure and urine for [Name] [Badge Number] working at BBO.

7-11-66: Page 45 – Gamma spec [Name] [Badge Number] – 0.004 µg. Urine sample requested.

10-7-66: Page 112 – [Name] [Badge Number]. Glove failures 182 > 100K c/m. Nose, mouth, hair, sides of face, back of neck decontaminated to ...c/m at nose and mouth – sent to body counter at 1220.

10-24-66: Page 124 – Explosion at the incinerator about 1720 hrs. Blew a window off the east side of the dry box. All of Rms 149, 148, 146, and 181 contaminated. Twelve people sent to medical and the body counter. Those body counted:

[Name] [Badge Number] x 12.

11-4-66: Page 133 – [Name] lost his Oct badge at badge change time. Asked [Name] to assign same dose vs. per mista.

12-1-66: Page 150 – Contaminated incident in 76 Bldg. South degreaser at 2135 hrs. [Name] [Badge Number] contaminated to 60K on face. Nose smear were 57 & 44 d/m. Decontamination completed at medical.

## **Logbook 12/5/66 – 6/11/67**

1/11/67: Page 26 – Gamma spec. on [Name] [Badge Number] – 1.29 µg. Dr. [Name] and [Name] were called. Medical action to be taken in the morning at 0800.

1/18/67: Page 31 – [Name] [Badge Number] sent to Bldg 22 for body count.

2/7/67: Page 45 – See Instructions for film badge study at the fluorinator. PMs and Mid please pick up film badges and record reading indicated.

2/19/67: pg. 50 - Changed [Name] [Badge Number] film badges after his work on special Am project. Readings were 628 mr on the body badge and 874 mr on the wrist badge.

2/28/67: Page 60 – Talked to 2 groups of operators from Rm 114 about latest film badge list. All had high reading. Some quite concerned. Present were [Name], [Name], [Name], [Name], [Name], [Name] and [Name]. Explained how they can help control their own exposures by using shielding, distance, time and housekeeping.

3/6/67: pg. 66 - Checked on film badge results for [Name] and [Name]. Reference future work with Cm in January.

3/11/67: Page 72 – 0650 hrs Possible inhalation of [Name] [Badge Number] from a glove failure at the R6 filters. Face 10K and arm 100K before washing after several washings in the decontamination room. Face 1K and arm 30K.

3/11/67: Page 72 – 0700 hrs Possible inhalation exposure of [Name] [Badge Number]. Top of head 50K and face 2K before washing. Source of the contamination is unknown. [Name] was on top of several boxes completing shutdown operations.

3/15/67: Page 75 – Started film study at 114 Fluorinator a 3 badge shield of micarda and Pb tape stationed in cabinet at box. 1 Control badge remain in block all times during the study. Operators – [Name] and [Name] each have a badge in the Block and will be worn only during bag cuts and material transfer outside of drybox. Attempting to establish amount of exposure other than working in drybox gloves.

5/23/67: Page 131 - Special film badges are to be worn by people involved with the Pu/Be Project. Regular film badges are not to be worn.

6/6/67: Page 141 – Talked to [Name] about his recent exposure. 781 mrem for month of April. His May exposure will be as high or higher (148 Fluorinator). Showed him the dose rate of 60 mr with shielding open 30 mR closed. Told him to spend as much time as possible out of the gloves and out of the fluor room. He was not aware that there should not be material stored on floor in room (pkg. of oxide). He is 20 years old. I estimate he will exceed this quarter tolerance by 2.5 times if he remains on the fluorinator.

## **Logbook 12/12/66 –12/31/68 (Kittinger 1966)**

12-14-66: Page 1 – [Name] to notify Met Prod – 71 about exposure status of [Name], [Name], [Name], and [Name]. [Name] at ~ 2,000 mrem for Oct Nov; [Name], [Name] and [Name] all betw. 1,500 and 1,600.

12-23-66: Page 4 - Rec'd film badge results – investigation of [Name] ~1100 Nov exp. Showed he was assigned to fluorinator 71 Met Prod for 3 wks in Nov.

2-3-67: Page 12 – [Name] and I met with [Name], [Name], [Name], [Name], [Name], & [Name] to discuss the procedures relevant to body counting, would counting, and urine sampling. Agreed that any detectable contam. about the nose and mouth area dictates body counting – set up procedures for more rapid scheduling. Also any would initially above background calls for special urine sampling. Also decided to furnish [Name] with a copy of the accident report – ordered 3 copy forms. Drafted letter to be sent to foreman explaining the procedures.

2-27-67: Page 18 - Notified by [Name] that [Name] & [Name] are now restricted from Pu work & that letters have been sent to their superv.

3-7-67: Page 19 - Notified [Name] that [Name] should be immed restricted from expos in March & that [Name] & [Name] should have expos. potential drastically reduced. Sent letter on 12 people to [Name].

3-9-67: Page 20 – In conv. With [Name], he stated [Name] neutron expos. On Feb badge was underevaluated.

3-10-67: Page 21 - Advised [Name] (after [Name] call) that [Name] neutron dose for Feb. is revised upward – he should be immed restricted. [Name] agreed.

3-17-67: Page 23 - Drafted letter to [Name] on background of over-exposures to [Name] & [Name]. Gave to [Name] for editing.

3-30-67: Page 26 - Met with [Name], [Name], & [Name] to formulate report to AEC on overexposures to [Name] & [Name].

3-31-67: Page 26 - Drafted answer to questions raised on overexposure report for [Name] & [Name]. Sent copy to [Name] for his comments.

4-3-67: Page 27 - [Name] reviewed and had [Name] review, both OKd, statements to be used on overexposure report.

4-4-67: Page 28 – Met w [Name], [Name] and [Name] to discuss neutron data from Mfg. Techs. Be-Pu runs. Data somewhat inconclusive. [Name] to meet with [Name] in afternoon. He is to indicate Pu-Be harder to shield than PuF4 – that heel and salt from electro-ref. give up to

10 times more neutrons than original mix – also to ask for better sampling next. Will ask for more runs.

4-11-67: Page 30 - Reported to [Name], high exposures reported by [Name]:

	Jan-Feb	Mar	Total
[Name]	1121	1435n + 604γ	3160
[Name]	1603	445 + 423	2971
[Name]	1338	1140 + 346	2824
[Name]	1513	854 + 365	2732
[Name]	2144		2971
[Name]	2553		2790
[Name]	2373		2610
[Name]	2761		2853
[Name]	2893		2906
[Name]	2484		2999
[Name]	2581		2591

4-19-67: Page 33 - Gave [Name] urine values for [Name] for past year – consistent positive – recommended he caution the man about resp. protection.

4-19-67: Page 33 – Rec'd two-wk pen. Expos. For 71 fast recycle personnel. 7 were over 800 mrem. Wrote a letter to [Name] with details.

4-24-67: Page 35 – Rec'd word from [Name] that [Name] [Badge Number] was over 3 Rem for 1<sup>st</sup> quarter. Talked with [Name] & [Name] about his work assignments. He has been heavily involved in charge makeup using site returns.

4-26-67: Page 35 - [Name], [Name], & I met with [Name] to investigate cause for [Name] overexposure. They ([Name] & [Name]) have talked to [Name]. They feel major cause is the in operation of the belt conveyor for about two weeks in March while chainveyor was installed. I wrote description of cause, [Name] OKd, and sent to [Name].

4-27-67: Page 36 – [Name] of [Name] group was reported with a high hand exposure for March ~ 20,000 mrem. [Name] and the HP foreman to investigate.

7-24-67: Page 52 – Checked on overexposures to [Name], [Name], and [Name]. [Name] worked fluoride box prior to June to give him the bulk of exposure. [Name] worked Am box, Rm. 114. [Name] worked Line 3, Rm 114 – radiation readings and investigation with him do not support exposure. Wrist badge shows only 246 mrem, while body badge shows 2398 mrem.

8-28-67: Page 61 - Asked [Name] to recheck film badges for neutrons of fluorinator operators:

	Reported at (mrem)	{Name} found (mrem)

[Name]	66	72
[Name]	25	329
[Name]	175	364

8-28-67: Page 61 – Last week asked for all foundry people working on ZPPR in 71 to be body counted. Gave [Name] a list:

[Name] x 5

Day:

[Name] x 5

PM:

[Name] x 6

To date [Name], [Name], and [Name] have been found with positive indications.

9-14-67: Page 64 - Asked [Name] to recheck neutron exposure for [Name] & [Name] who were assigned fluorinator operations – [Name] found they were evaluated about 130 mrem low. Also told [Name] I think gamma results are too low recently. He said he would check recency of calibration.

9-26-67: Page 67 - Received IBM sheets on film badge results. In tally with our 2 wk tabulations found we were low on several people because of late badge results we had not received. [Name] was one of these. As of Sept. 1 his quarter total was over 2,000 mrem. I called [Name] with this info. [Name] stated [Name] had been and still was on fluorinator work. [Name] said he would not move him now, but found later that he did. We were also low on 7 foundry people. In fact with 1<sup>st</sup> 2 weeks in Sept., [Name] is overexposed.

9-27-67: Page 67 – Consulted w [Name] and [Name] about radiation exposures resulting from ZPPR work plus site return work. Previously advised foundry to provide lead apron and use for bagout work both 76 & 71 ZPPR. They borrowed 2 aprons and requisitioned 6.

10-31-67: Page 75 - [Name] & his people – [Name] & his people are quite skeptical about film badge results. Oct results are abnormally high with little reason as far as production people are concerned. [Name] & I have talked about possibility that 60 kev being seen in Cd region & reported as hard radiation. Data on ZPPR people gives credence to this possibility. Talked with [Name] slightly – he does not feel this is happening.

11-9-67: Page 77 - Met with [Name], [Name], [Name], [Name], [Name], & [Name] to discuss evaluation of film badges. Finding confirmed that soft radiation finding way under Cd shield because of spacing in the badge. In some cases over evaluation is by a factor of 2. [Name] people to use correction factor until badges are modified. Full correction to be applied to 71 chem ops from Oct. 18.

12-7-67: Page 81 - [Name] reported extremely dark film badge for [Name] (Mfg engin)  
Supervision has checked with him and found no anomalous use. People doing similar work were [Name], [Name], & [Name].

12-15-67: Page 82 - Reported to [Name] that [Name] hand exposure as of Dec. 8 was 19,265 mr. Advised him to employ restrictions to avoid surpassing 25,000.

12-15-67: Page 83 – Reported to [Name] that [Name] hand exposure as of Dec. 8 was 19,265 mr. Advised him to employ restrictions to avoid surpassing 25,000.

12-15-67: Page 83 – Worked with [Name] to untangle meaning of yearly allowed pen column film badge sheet. This program is written incorrectly. It seems to show in some cases not what the annual limit is but rather how much can still be received – however stops at 5,000 level. [Name] is to have program rewritten.

3-19-68: Page 98 - On basis of Feb. film badge results, advised [Name] to take exposure restrictive measures for [Name] [Badge Number] & [Name] [Badge Number].

4-3-68: Page 101 – Small explosion in glove box in Rm 120-M – 3 men to body counter.

4-5-68: Page 102 - Met with [Name] & [Name] to give them advice on Step II hearing involving transfer of [Name] & [Name] to 44 because they were near 1250 level. Affirmed to them that H.P. believes 1250 mrem/quarter to be proper level to alter a man's job to effect exposure reduction.

5-7-68: Page 107 - Notified [Name] of 2-week exposure to [Name] 1275 mrem neutrons, ~250 mr gamma. Also gave him exposures to neutrons for all over 200 mrem – plus total exposures to [Name], [Name], and [Name].

6-4-68: Page 111 - Reported following prelim. results to [Name] for film badge period 5-17 through 28:

[Name] – 670 mr gamma  
[Name] – 670 mrem neutrons  
[Name] – 1079  
[Name] – 715  
[Name] – 828  
[Name] - 768

6-18-68: Page 113 - Rec'd 771 film badge results – blank showed about 500 mrem neutrons – bulk of exposures are obviously too high. Checked with [Name] on any shift correlation. Inspected rack for storage practice. Appears that bulk of personnel use the rack. [Name] took the one-month blank for reading.

Also received a special film report on possible X-ray exposure to [Name]. His badge showed ~500 mrem neutrons. [Name] talked to him and discovered that [Name] has several 100 grams of Pu-Be stored in his area. Will check this out further with survey instrument.

6-19-69: Page 113 - From check of unused films, [Name] decided film contam. cause of problem in neutron exposures for 71 & 76 2-wk change. Consulted w/[Name], decided to make neutron dose assignment on basis of area survey info and work assignments. Used foreman's check of work assignments.

7-2-68: Page 116 - Assigned neutron doses to 71 personnel on basis of area exposure surveys and work assignment – due to contam. neutron film.

7-30-68: Page 119 - Met with [Name], [Name], & [Name] to agree on dose to be assigned to [Name] [Badge Number]. [Name] was involved in about 25 hr. of close work on a unit. Film badge was pulled & gave incredible result of ~150 mr. Assignment agreed to by all was on this basis:

	<u>Dose rate</u>	<u>Time</u>	<u>Est. dose</u>	<u>Meas. dose*</u>	<u>Ratio</u>	<u>Assigned dose</u>
[Name]	17	5 hr	85	59	0.69	
[Name]	80	25 hr	2000	?	0.69	1380

\* Measured dose for [Name] was subsequent to [Name] exposure and was film unconfirmed by TLD. Submitted draft of letter to [Name] on recommendations for future short-type work for [Name] OK....

9-5-68: Page 126 - Notified [Name] of [Name] high expos., period 8/15-8/29 978 mrem.

9-6-68: Page 127 - Rec'd & passed on film badge runs for Fndry & chem. ops. 23 chem ops people over prorated quart. level (850) high is [Name] (?) over 2000.

9-20-68: Page 130 - Made special of [Name] badge from Sept 3 to Sept. 14. He received 383 mrem (125  $\gamma$ , 258 neutron). I discovered yesterday from 2-wk badge change list that he had transferred to 776 Prod. Cont. Yesterday I discussed his exposure control w [Name] and pulled his badge to date. His quarterly total to yesterday is: 2124 to 8-29 and 383 from this special to 2507. I verbally recommended to [Name] that he be restricted from the area.

9-21-68: Page 131 - [Name] was rotated to 44 by Prod. Cont.

10-8-68: Page 134 - Incident in foundry – [Name] working in B-12 furnace box pulled off glove as he retracted his hand. Glove was held on by “O” ring – some contradictions as to whether inner plastic glove ring involved or not. High air contam. resulted in NW corner of 776. Body counted were: [Name], [Name], [Name], [Name], [Name], [Name].

10-14-68: Page 136 - Incident in Bldg 71 – waste barrel fire in 114 – contam. spread was general throughout 114, but fairly low level – 2 to 3k. About 10 people sent to body counter: [Name], and [Name]. All neg except [Name]. [Name] estimates him at about 1 lung burden

based on a 1000 ppm estimate of <sup>241</sup>Am. [Name] & [Name] notified [Name] should be restricted from hot area pending further determinations. ([Name] reports 163 ppm <sup>241</sup>Am from smear sample of drum).

10-16-68: Page 137 - [Name] estimated at ~ 6 mplb – relayed info to [Name] & [Name]. [Name] is now working in 881. Checked w [Name]. This is not an acceptable location to us. Will inform [Name].

11-6-68: Page 140 - Explosion – K furnace 771 – blow out liquid from crit drains in fluorinator. Air contamination in immed. area 7100K c/m direct. Sent to body counter: [Name] [Badge Number] x 9

Got nose swipes on these people. About 2400 ft<sup>2</sup> of area contaminated >100K cpm. Only [Name] showed positive count – to be studied.

11-18-68: Page 142 - 2 sheet metal men, [Name] & [Name] sent to body counter for potential inhalation exposures. Appear to have pulled lead tape from box counter to... given to the monitor ([Name]). Were not wearing respirators. [Name] neg. on body count. [Name] appears to be above 25 – will be recounted. 2<sup>nd</sup> count bkgd.

12-12-68: Page 147 – Called for badge change on following maint. People who worked on mill cleanout.

[Name] [Badge Number] x 10

### **Logbook 6/12/67-12/29/67**

6-29-67: Page 16 – Talked to ...about [Name] on 148 Flourinator judging from readings and study with neutrometers it would indicate 777 mrem of exposure in the past 4 days. Front of box without shielding 75 to 80 mrem - with shielding 35 mrem.

7-1-67: Page 18 - [Name] to medical at 1945 to decontam. hands. Storage went with him to check him out.

8-11/67: Page 49 – Talked to [Name], [Name], and [Name] about the gamma and neutron levels in Rm. 182. To much storage in area – [Name] is running 65 mrem on dosimeter for today. He is at the mold coating box.

8-30-67: Page 62 – Gamma spec. on [Name] [Badge Number] Possible caustic burn on both knees.

9-25-67: Page 81 – Send [Name] and [Name] to body counter suspected exposures from holes in gloves. Both had contaminated face.

11-1-67: Page 110 – Gamma spect on [Name] [Badge Number]. Acid burn on left forearm. Contamination still present. Will make final count when burn would is cold.

11-1-67: Page 110 – [Name] [Badge Number] contaminated face from hole in glove-up to 4,000 c/m called – [Name] he will body count him on 11-2-67.

11-22-67: Page 125 – [Name] [Badge Number] told to report to the body counter at 0800 hrs Tuesday 11/28/67. Possible inhalation exposure Line 4 Rm. 114.

11-30-67: Page 129 – [Name] [Badge Number] will come in, 5 hr early for a body counter check for possible lung contamination.

12-20-67: Page 143 – Called [Name] regarding a possible inhalation exposure for [Name]. [Name] will report to the body counter tomorrow at 1515 hrs.

### **Logbook 1/2/68 – 7/5/68**

1/12/68: Page 10 - Informed [Name] regarding the BB1. Labeling. [Name] [Badge Number] alpha spec initial .48 ug time 0500 hrs. Dr. [Name] will examine the wound at 0800 this morning for further treatment. Wound had .20 ug after scrubbing and scraping. Wound was excised and final reading bkdg.

2/15/68: Page 38 – [Name] received 3 to 5 k c/m around his nose and mouth when a glove failed on A-9 Bldg. 76 at ~ 1820. Arranged with [Name] to have him body counted at 1530 on 2-16-68 (Notified [Name])

2/25/68: Page 45 – Spill at Line 14 during window change. [Name] and [Name] to Medical for decontam and alpha spec for [Name] only , because of 2 small existing sores on his left wrist. Urine samples requested and body count is to be arranged for 2-26-68. All maint. People in Bldg. put on decontam. of area. Area Contam. is principally east of Line 14 and east end of fluorinator room. 14 operators are being brought in 4 hrs early on 2-26-68 to complete cleanup operations. 2 monitors called in to cover ([Name], [Name]).

3/22/68: Page 66: [Name] [Badge Number] – urine sample requested. – There is a possibility his resp may have leaked. A body count will be arranged by [Name] or [Name] for Tues morn.

4/11/68: Page 81 – [Name] [Badge Number] to medical for gamma speck. Initial count 3.9 ug. Final 0.05 ug.

4/19/68: Page 87 – Talked to [Name] regarding exposures that might be experienced during the clean up of the fluorinator in Room 148. It was decided to put special body badges on [Name] [Badge Number] and [Name] [Badge Number] for Sat 4/20/68 and have them read immediately. 1<sup>st</sup> quarter readings for [Name] (694 Pen) ([Name] 481 Pen).

4/22/68: Page 89 – Special film badge results for Sat. work on 148 Fluorinator –

[Name]	205(n)	14 (photon)
[Name]	160(n)	15 (photon).

4/26/68: Page 93 – Gamma spect on [Name]. 0.028 ug was told to report to medical mon. at 1480.

5/10/69: Page 105 – Got a special develop and reading on film badge for [Name] [Badge Number]. He has worked on 114 fluorinator shielding two days this week. Badge showed gamma=33 and n=180 – from May 3 thru May 9. Told [Name] not to use him today and sat for welding on 114 fluor.

5-28-68: Page 119 – Gamma Spec on [Name] [Badge Number]. Final net count was .003 ug. To report into medical tomorrow P.M. Bucket request was issued.

6-4-68: Page 123 – A sudden squall that blew in from the east spread contam. from the rabbit pen on to the people working there and into Bldg 03 itself contaminating the inside of the Bldg to 10,000 c/m. Lunch boxes in the Bldg were also contam. All lunches were discarded and lunches were furnished to them. [Name] street pants were contam. to 500 c/m. They were cleansed up with tape. Also [Name] car was generally contam to 300 and 400 c/m on both the inside and outside. It was driven in to 74 Bldg. area and dcontam. Operators were decontam. in Rm 169.

6-10-68: Page 127 – Reported to medical at 1600 to take gamma spec on [Name]. Dr. [Name] was there and it turns out that no burn was received as was at first reported. High level contam. did exist on thumb nail however and we were unable to reduce it to < 2000 c/m. Had medical put a rubber cover on his thumb and sent him home with 2000 c/m still on his thumb nail. Asked him to check back into H.P. tomorrow for another check and advise on what other action if any should be taken.

6/17/68: Page 132 – Possible inhalation exposure on [Name] [Badge Number] working at the “W” box. [Name] called for body counting at 2015 hrs. [Name] is not sure what caused the release that set off the continuous air monitor behind them. That sample greater than 100,000 c/m, B-15 > 100,000 c/m. [Name] [Badge Number] also in area and sent up for body count.

6/27/68: Page 140 – [Name] went thru glove on 181 cascades. Received >100,000 c/m on right forearm. Reduced to 2,000 c/m at medical. Ointment used on arm and spot where high level remained was bandaged. He was told to report to medical at 1530 tomorrow afternoon.

### **RFP Logbook 7/8/68-2/4/69**

7/9/68: Page 2 – Scheduled [Name] for body count – Rm 185 incident 7/8/68.

7/11/68: Page 4 – Badge results on Mrf. Eng. Work the 12/8 Fluor results from 1 Jul to 10 Jul.

	Neutron	Gamma Body	Wrist
[Name] [Badge Number]	174	26	37
[Name] [Badge Number]	114	1	34
[Name] [Badge Number]	174	28	3
[Name] [Badge Number]	102	55	77

[Name] [Badge Number]	126	20	50
[Name] [Badge Number]	114	6	14

8/8/68: Page 26 – Scheduled [Name] [Badge Number] for body count at 0745 tomorrow morning. He was involved in spill at Line #30 on day shift.

8/21/68: Page 35 – Sent [Name] [Badge Number] to body counter. 114 Flour. Incident.

8/22/68: Page 36 – Talked to [Name] about his two forgotten badges within a six month period. The First “F” badge issued in this period was on 6-17-68 & he was working in the uranium area that week for [Name].

8/22/68: Page 36 – Scheduled [Name] [Badge Number] for body count on 8-23-68 at 1515. Urine and fecal samples requested.

9/13/68: Page 51: Incident at Line 13 & 14 resulted in the following people being sent to the body counter Monday 9-16-68 at 1500 hrs. [Name] [Badge Number], [Name] [Badge Number], and [Name] [Badge Number].

9-25-68: Page 60 – Incident at BBO end of PM shift. [Name] [Badge Number] told to report to body counter, (again) (9-25-68 at 1500 hrs). Scheduled with [Name].

10-16-68: Page 75 – Body count requested this AM for [Name] [Badge Number]. Possible inhalation.

10-18-68: Page 77 – Requested 5 special body and wrist badges form [Name] to be used on special project next week in Rms. 180E & F. Badges will be down Monday.

10-22-68: Page 79 – Special project with Am started in Rm 180E. Special film badges were sent down.

10-26-68: Page 83 – Small incident occurred at incinerator 1100 hrs when pipefitters were removing insulation from heat exchanger. 70 sq. ft. floor to 50,000 c/m. Slight personnel contamination to [Name], [Name], & and [Name]. Not wearing respirators. [Name] issued special urine requests for all 3.

11-6-68: Page 91 – Possible internal exposure from glove failure at Line 45 for [Name]. Body count 0700 1715 AM.

11-6-68: Page 91 – Chem line explosion and fire – body counting scheduled for [Name] [Badge Number]; [Name] [Badge Number].

11-13-68: Page 96 – Scheduled [Name] for body count – He was in Rm. 247 on 11-6-68 when the explosion occurred at K-1.

11-13-68: Page 96 – Sent film badges for [Name] (RCA Service Man) and [Name] [Badge Number] to [Name] for special developing. They were working on the electron microscope and may have been exposed to x-rays.

11-20-68: Page 101 – Body count requested for [Name] [Badge Number]. 7000 c/m around nose and mouth, chin, neck and hair. 40,000 c/m chest. Possible sources checked no source found. (All gloves Line 2, 2 orange tanks top Line 2, six shielded storage pots, N. enc 114 and two glovees on fluorinator all neg.)

12-11-68: Page 114 – 0001 Line 20 [Name] [Badge Number]. Adjusting air flow valve on sparge line. Needle released from valve allowing contaminated air to escape directly onto [Name] side of face contaminated to 2000 c/m. Left arm to 20,000 c/m. 100 sq. ft. floor to 20,000 c/m. Body counted 0700 this AM.

12-30-68: Page 126 – SA 114 Fluorinator – enlarging windows. 990 mrem neutron 8 mr  $\gamma$ . [Name] [Badge Number], [Name] [Badge Number], [Name] [Badge Number]. Restricted today's work only.

1-2-69: Page 128 – Asked dosimetry for special development of body badges because of involvement in S.A. at 114 Fluor last Mon. and Tues. For [Name] and [Name] (Sheelmetal).

1-3-69: Page 129 – [Name], [Name] [Badge Number] scheduled for body count at 0800. Nose swipes and material swipes taken and submitted to [Name]. On material swipe to [Name] for ppm Am analy.

1-3-69: Page 129 – Talked to [Name] about ex. Exposures to [Name] [Badge Number] and [Name] [Badge Number]. Suggested he pull these two people off the job on 114A Fluor. And use two others. Inst. Readings – Average of 100 mrem/hr – [Name] on job all day Tuesday and ½ day Thur and Tri. [Name] on job ½ day Tuesday – Thur and Fri.

1-3-69: Page 129 – Changed body badge films for [Name] [Badge Number] and [Name] [Badge Number]. Sent on film to dosimetry for development.

1-10-69: Page 134 – Incident at Line 2 – [Name] [Badge Number] and [Name] [Badge Number] scheduled for a body count. [Name] called at 0540 hrs. and he will be in by 0700 hrs. Nasal swabs taken and sent along to body counter.

1-14-69: Page 136 – Glove failure at Line 15 – [Name] [Badge Number] scheduled for a body count at 0700. [Name] called and he is coming in early. Smear to [Name] 1050 ppm Am.

1-23-69: Page 144 – Gamma spect. On [Name] pipefitter 76 Bldg. SCAB! Came off of old wound which was highly contaminated. Results were Neg. [Name] was also sent home from medical with a contaminated air and contaminated leg. This all came from S.A. job at 4 hl mill 76 Bldg. [Name] was the monitor. Arm was 4,000 c/m Leg 2,000 c/m when he went home.

Body count requested for [Name] [Badge Number]. See incident and possible exposure sheet. Will report to medical at 1500 hrs on 1-14-69.

1-27-69: Page 146 – Picked up ZPPR badge for special results.

1-27-69: Page 146 – Incident at Line 30 ~1800 hrs. Flange leaked going into top Line 30. Sprayed [Name] forehead and coveralls. Possible exposure reports for [Name] [Badge Number] and [Name] [Badge Number].

1-28-69: Page 147 – Scheduled [Name] [Badge Number] for body count @ 1530 1-29-69. Told me he was in area of spill at Line 30 1-27-69.

### **Logbook 2/5/69 – 9/3/69**

2-5-69: Page 1 - [Name] and [Name] [Badge Number] scheduled for body count after 180 F incident. Nose swipes and smears sent to [Name] and 71 labs

2-5-69: Page 1 - Count remaining from CA Job 249 on [Name] finger R.hand 1500 cm, 4<sup>th</sup> Finger 2,00c/m Elbow 500 c/m

3-7-69: Page 23 - Body count on [Name] [Badge Number]- “B” box Incident RM 160

3-11-69: Page 25 - [Name] [Badge Number] became contaminated while working with tank farm-face-hand's greater than 100,00 c/m he was scheduled for body count ( no work permit was issued for pre check of [Name])

4-23-69: Page 55 - [Name] and [Name] were sent up to body count from an incident at Button Breakout. [Name] had 4,000 c/m around nose

4-24-69: Page 56 - Might be a good idea to find out who the Am separators were that worked around lines 43 and 44 on 4-23-69 and maybe give them a pee bucket or schedule them for a body count due to the significance of the incident at line 43 on Pm shift 4-23-69 ( see incident report) Air samples B-17, 18 and 19 were running 1,000,000 c/m and were running from 2K to 6K

4-24-69: Page 56 - [Name] I asked production to have [Name], [Name], and [Name] to come in for a body count because of the incident at the end of the Pm shift 4-23-69

4-24-69: Page 56 - [Name] sent up for body count- this was from incident at BBO, results negative

5-6-69: Page 66 – Body count for [Name] – possible inhalation. [Name] and [Name] came out – to do the counting.

5-9-69: Page 69 - Smoke reports coming out of stack at 1015 Hrs [Name] came it to find out if we are getting a air sample – referred her to site survey samples [Name] [Badge Number] sent to

body counter @ 1000 for possible inhalation source believed to be hot pickup that he was emptying smears we sent to pick

5-14-69: Page 72 - [Name] to medical to check decontaminating crew and shower stall approx 1.5 hrs

5-15-69: Page 73 - Body count for [Name] [Badge Number] contaminated from samples in room 166 A. She has to be recounted at 0745 on 5-16-69.

5-16-69: Page 74 - Called [Name] in 0240 to take body count on [Name] (guard doing fire patrol in 76 Bldg)

5-19-69: Page 75 - Fire at incinerator at 1930 hrs all of room 149 contaminated- one glove burned off line loss of vacuum in day bay big factor. Sent 6 mon to body counter.

[Name] [Badge Number] x 5

3-28-69: Page 38 - Body count requested for [Name] [Badge Number] 10K c/m on face Glove failure at line #2

4-10-69: Page 46 – Fire at K-2 Furnace (1800 hrs) 3 gloves burned off of line. 8 personnel sent to body count.

[Name] [Badge Number] x 8

Decontamination started immed. not completed on this shift. xx = some positive; xx fecal samples requested. [Name] did the counting 0700-2300. Sent material smear to [Name]. He told me on phone that he could analyze it.

4-11-69: Page 47 – Passed out fecal sample card's to personnel that were body counted from K-2 fire.

5-22-69: Page 78 – Body count requested for [Name] [Badge Number] and [Name] [Badge Number]. Both were involved in handling a plastic bag with a hole in it.

6-10-69: Page 90 – Body count requested for [Name] – Possible inhalation exposure – Incident at Line #16 – Sample for Am determination taken by [Name] and sent to 881 Bldg.

6-10-69: Page 90 – Sent Land to Body counter \_ he was contaminated around face (2,000 c/m – 4,000 c/m) source holes in glove.

6-16-69: Page 94 – Body count for [Name] for incident on 6-13-69.

6-17-69: Page 95 – TLDs being used on special Am job in Room 180F.

6-25-69: Page 101 – 2115 hrs criticality drain on line #30 ran over we only have cloth booties to use, material is running 146g/liter. At least 6 pr shoes contaminated to > 100 K. 3 chem. Operators sent to medical for decontamination.

7-2-69: Page 106 - Body count requested for [Name]- [Name] and [Name]- incident in rm 182 ~ 1345 9 system pressurized)

7-2-69: Page 106 - [Name] [Badge Number] possible inhalation exposure Checked Bkg

7-3-69: Page 107 - Badged 14 fast recycle operators with special TLD badges for [Name].

7-11-69: Page 112 - [Name] [Badge Number] sent to body counter at 0715

7-14-69: Page 113 - [Name] to body count at 0715- he was roding out the off gas line inline 17, glove failed causing the contamination.

7-14-69: Page 113 - Scheduled [Name] for a body count at {Name's} request would also like to schedule [Name], [Name], [Name], [Name] is to report back to body counter at 1600hrs, 7-15-69

7-15-69: Page 114 - [Name] to body counter at 1600 hrs PER request of [Name]

[Name] - To body counters 1800hrs

[Name] - body counter 1900hrs

[Name] - body counter 2000hrs

7-16-69: Page 115 - Body count scheduled on [Name] [Badge Number] bag broke open in the tunnel

7-24-69: Page 121 - [Name] and [Name] sent to body count at 0630 possible inhalation from spill at line 30

7-25-69: Page 122 - Arranged TLD badging for 71 foundry operations with [Name] (to be changed weekly)

7-29-69: Page 124 - [Name] requested a fecal sample from [Name] who is on the midnight shift West notified

7-30-69: Page 125 - [Name] to body count- High air samples on 7-24-69 am 146 no evidence of source or reason for same found.

7-30-69: Page 125 - [Name] and [Name] to body count- line 9 rm 114 portable drybox

7-31-69: Page 126 – [Name] – [Name] – [Name] – [Name] to go to body count at 0630 hrs.

7-31-69: Page 126 – [Name] [Badge Number] Bldg Serv. Sent to the body counter as a result of fire last night. He was bkg.

7-31-69: Page 126 – [Name] to body counter – Bkg.

8-4-69: Page 129 – Decontaminated in tunnel – and burning of oxide [Name] [Badge Number] to body count at 0715 possible resp leak. All decontaminators are wearing assault masks in tunnel as a result (Two much sweat.).

8-8-69: Page 133 – [Name] was down to discuss setting up a special  $\gamma$ -n survey for the week of 8-11-69. Talked with [Name] for proper location of 12 men – Special TLD's are in folder in my drawer.

8-11-69: Page 134 – Issued [Name] and [Name] TLD badges.

8-12-69: Page 135 – Issued special badges as per [Name] request.

8-15-69: Page 138 – [Name] sent to body counter. Bkg.

8-18-69: Page 139 – [Name] [Badge Number] sent to body count – 0730 – He was in the tunnel without resp on 8-17-69.

8-21-69: Page 142 – Issued [Name] and [Name] TLD badges.

8-26-69: Page 145 – Body count scheduled for [Name] [Badge Number]. He became contaminated while working on Line 4. To be counted at 0700.

8-27-69: Page 146 – Issued TLD badges to [Name] and [Name] (3 day exposure)

8-27-69: Page 147: Issued special badges to [Name] [Badge Number] and [Name] [Badge Number] working on Line 17.

9-2-69: Page 150 – [Name] [Badge Number] sent to body counter. Bkg.

### **RFP Logbook 8-13-69 to 8-28-69**

8-14-69 (Midnight): Page 3 - [Name] hit his elbow on a can in the vault room when coming down a ladder. The skin was busted and [Name] went to Medical at 7:30 a.m.

8-14-69 (Midnight): Page 3 - [Name] noticed a small nick on his right thumb when he was being monitored out this a.m. He does not know when or how he did it. He was sent to Medical also....[Name] has a scab on his right knee and Medical asked to see him yesterday.

8-20-69: Page 12 - [Name] received small puncture on back of left hand. No contamination, medical applied bandage, cause was a small piece of wire.

8-20-69: Page 14 - [Name] to medical twice, cut finger both times.

8-23-69: Page 18 - [Name] to Medical – cut both knees – cold.

8-24-69: Page 19 - [Name] went to Medical – hit right thumb with screwdriver. Medical cleaned and applied bandage. [Name] got the top of left thumb between crowbar and pot which he was removing in 154A. It broke the skin just under the nail causing bleeding. Medical cleaned and applied bandage.

### **Hammond Logbook 9/19/65 - 5/14/69 (x)**

10/8/68: Page 137 - Pu (oxide) confirmed inhalation -- several personnel, North Foundry, 776 [Name] [Badge Number] showed positive lung exposure; blood and urine taken.

5/12/69: Page 144 - Entry for 776 fire: "40 people through body counter at this time (1000hrs); 1 fecal request, only 40 urine buckets.

5/13/69: Page 145 - [Name] blood sample of 5/12 contained 3.08 dpm/22 ml; fecal sample also taken

### **RFP Logbook (4/3/68-9/15/71)**

April 7, 1970, page 47 -

Neutron dosimeters for SNAP – NASA

March 23, 1971, Page 58 -

PuFl and PuBe neutron reading problems  
High exposure 771 – same old thing

### **776 Building Logbook [May 26 1969 June 16 1969]**

Page 65: 6-2-69 [Name] cut his thumb – was not contaminated – sent to Medical. He is OK.

### **RFP Logbook 6/16/69-8/28/69**

#### **Special Decontamination Crew Summer 1969 Fire**

6/17/69: Page 1 – [Name] [Badge Number], small laceration on left thumb between thumbnail and first knuckle. Take to medical at 2:55 M. HP test positive .005, cleaned to .003. No further medical required other than bandage. HP request urine sample. Object causing cut unknown.

6/21/69: Page 12 – [Name] [Badge Number] received small laceration on inside of right wrist. Left for medical at 2:15. Treated by medical and returned about 3:30 am. (urine sample requested).

7- 69: Page 91 – For a period from 4/69 to 7/18/69 there were a total of 99 trips to medical as a result of wounds or contamination. Some individuals had multiple trips during this period. [not verbatim]

7/27/69: Page 110 – [Name] was sent to medical with a small scratch on the forefinger of his right hand it checked out OK.

7/27/69: Page 110 – [Name] went to medical at 5:45 AM with puncture wound in left index finger. The cause was a ceiling nail.

8/1/69: Page 122 – [Name] and [Name] to medical. Both contaminated.

### **RFP Logbook 2/5/69 – 9/3/69**

3/11/69: Page 25 - [Name] [Badge Number] Contaminated on face and hands with 100,000 cpm Pu "scheduled for WB count"

### **RFP Logbook 9/4/69 – 3/3/70 (Foreman's HP Log Bldg 771)**

Page 5: 9-10-69 – [Name] sprayed with acid at Line 12 – Sent to Medical and body count requested.

Page 8: 9-15-69 – [Name] [Badge Number] and [Name] [Badge Number] were sent to body count by request of [Name], due to contam area at Line 17 that occurred last Friday PM's after window charge – Reminded [Name] that we have a PM man at Body Counter and he could pay for O.T. rather than wait three days after incident.

Page 13: 9-22-69 – [Name], [Name], and [Name] scheduled for body count, due to incident on Sat. nite. [Name] reported that all three men were Bkgd.

Page 14: 9-23-69 – [Name] called and said that [Name] would like to request urine samples for [Name] [Badge Number], [Name] [Badge Number] and [Name] [Badge Number] due to incident that occurred on Sat. nite 9-20-69.

Page 18: 9-26-69 –

Body Count for [Name] [Badge Number] Possible inhalation Line #11 – [Name].  
[Name] [Badge Number] scheduled for Body Count – Line 13 Incident  
[Name] [Badge Number] scheduled for Body Count – Line 13 Incident

Page 19: 9-27-69 - Gamma spec in 776 Bldg is not working properly. If gamma spec is needed use the one in Medical. Techs and [Name] notified.

Page 23: 10-2-69 – Body count scheduled for [Name] [Badge Number] and [Name] [Badge Number], because of incident at 500 tanks sight gauge on 10-1-69.

Page 47: 10-30-69 – [Name] [Badge Number] to Medical for gamma spec. – Body Count & decontamination from incident at Line 5.

Page 69: 11-25-69 – [Name] called about [Name] pen. Exposure for October checked it out and he was actually on several jobs in hot area. Will special his November badge for immediate results.

Sent [Name], [Name], and [Name] to the body counter because at a steam trap leak.

11-26-69: Page 70 – Informed [Name] to keep [Name] off of any hot jobs (penetrating) due to his high exposure during October (restrict until first of the year).

11-26-69: Page 70 – [Name] & [Name] scheduled for body count due to incident at Line 2 at 1030 on 11-25-69.

11-26-69: Page 70 – [Name] wants smear samples for body counts on [Name] (Steam Line Leak) and [Name] (Line 2).

12-10-69: Page 80 – [Name] [Badge Number] and [Name] [Badge Number] work about 30 mm in close contact with the pneumatic blower filter surface court on the filter. 383 mrem/hr neutron & 290 mrem/hr gamma. 3 ft readings 60 mrem/hr and 11 mr/hr gamma. Body count requested on both men because their faces became contaminated while removing S.A. hood.

12-12-69: Page 82 – [Name] [Badge Number] sent to medical for decontamination. Final count 1.5-2K on left forearm still remaining.

1-24-70: Page 116 – [Name] to body count at 1720 has relative sample in foreman's tray. [Name] to body count at 1950. Sample also in tray. [Name] to medial at 1800 for decontamination.

2-17-70: Page 136 – [Name] sent to body counter, possible inhalation exposure from bag failure Line 44.

2-19-70: Page 138 – New special badge rack: these badges should only be issued by the foreman or by the monitors specifically asked to do so. They can be used for replacement badges on special studies. Lost badge replacement badges issued only at the request of the man's supervisor. (Paper work similar to lost security badge reports will be coming from [Name]). A returned (borrowed) badge should be hung backwards, and used only once. Special study badges will be picked up daily, at our request the whole rack will be replaced monthly. One of the BKG badges should go with each return to 123. Use log sheet provided, including only TLD number and the man number.

3-2-70: Page 147 –

Gamma spec. [Name] [Badge Number]

Gamma spec. (Recheck) [Name] [Badge Number] recommended he see Dr. [Name] regarding wound.

[Name] [Badge Number] sent to body counter. Possible count results (Boarder line) Recount tomorrow.

### **RFP Logbook\_Sept \_11\_1969\_Dec\_26\_1969**

Page 1: 9-11-69 Asked that new people be provided film badges when they report to the job.

### **Kittinger's Log Book No. IV (Kittinger 1969)**

**1/2/69 – 3/28/72**

1/8/69: Page 2 – Met w [Name], discussed lack of badge change for contractor personnel – many as old as Mar 68 issue. [Name] to correct this and place all workers in 76-77 on mo. change. Also discussed lack of credibility for neutron dose data. This seems to me to be much poorer data in the past 3 months even than before. [Name] will ask [Name] to again examine calibration and do comparative studies with Texas Nuclear. [Name] feels we need to abandon film and assign dose.

1/24/69: Page 7 – [Name] talked to [Name] about his 1139 mrem exposure in 1<sup>st</sup> 2-week period. [Name] claims no unusual work situations – was on fluorinator operations majority of the period. [Name] worked with him on this assignment.

1/29/69: Page 8 – [Name] reported urine sample from [Name] S & W man [Badge Number] was 3.8 dpm/24 hr. [Name] informed [Name] foreman that he should submit a re-sample because it appeared the lab had contaminated his sample. [Name] had suggested to [Name] that he submit the original sample not because [Name] had come to him concerned that he was receiving no sampling.

1/29/69: Page 9 – Discussed status of neutron dosimetry w [Name]. He reports from instrumentation meeting he just attended that other contractor having same problem – disparity between survey instr. Readings & NTA film. They have no plans to solve this problem. [Name] also reported other installations using wrist badges only on very limited special issue basis. [Name] indicated Brookhaven (I think) feels some promise in neutron eval. From TLDs either enriched or depleted in <sup>6</sup>Li.

3/5/69: Page 22 – Called [Name] about [Name] Jan. film badge result 580 mrem.

3/5/69: Page 22 – Rec'd 2 wk film badge results for 771 – 2 da late because 1 pers. Meters tech. missing. – Called [Name] and gave him names and totals for all > 300 mrem. ~ 30 people.

3/6/69: Page 22 – Met w [Name] – requested shielding be installed for unit storage in Rm 217 of 779. Showed him copy of shielding recommended to [Name] in Sept. 68, copy of current survey, and dose sustained by [Name] at his desk (639 mrem) because of this unshielded storage. [Name] agreed to investigate shielding possibilities. I plan to follow up w letter & copy of most recent survey.

3/6/69: Page 22 – Asked [Name] to read [Name] Feb. badge as soon as possible. Got special badge for [Name]’s bank.

3/7/69: Page 23 – Rec’d Feb film results for [Name], 1170 mrem, .. 639 for [Name] gives total of 1809 mrem. Called [Name] Asking for help on getting shielding. Wrote letter to [Name] Asking for removal of units or shielding.

3/10/69: Page 23 – Rec’d 771 film badge results today – 1 wk late. Wrote letter to [Name]. 25 people above pro-rated.

4/3/69: Page 30 – High gamma ct from 2 dreams in 774 produced high pers. expos during last film badge period 3/13-3/27.

	Neutron	Gamma	Total
[Name]	20	435	455
[Name]	20	376	396
[Name]	24	531	555
[Name]	54	526	550

4/10/69: Page 32 – Met w [Name] to discuss my concern over inc. in positive urine results. For 5-mo period 43% of all samples run for Pu are positive. [Name] knows that a significant cross contam. problem exists in the lab and expects this to be corrected when new lab facility are occupied. He does not feel the impact of the samle contam. will be great since anomalous results are excluded from computer tape and since this situation should be corrected shortly. He promised to carefully examine the exposure history of any personnel before work restrictions are imposed.

4/11/69: Page 32 – 771 Incident at reduction line 149 last night (PM). Reduction reactor blew up and several gloves burned off the box. Eight indiv were body counted. [Name], [Name], [Name], [Name], [Name], [Name], and [Name]. [Name] & [Name] showed positive counts about equal to last counts (1964 for [Name] and Jan 69 for [Name]). [Name] and [Name] were positive and possibly above perm lung burden. The 4 positives are to be recounted tonite and Mon. nite. All 8 were given cartons for fecal samples today. Am conc. judged to be 180 ppm.

4/18/69: Page 34 – Conferred w [Name] and he will act to delete 715 mrad pen and 719 mrem skin for [Name] [Badge Number]. This was recorded for a Sept. badge left on a smock and left hanging in the area until turning in in April.

4/24/69: Page 36 – [Name] counted again today – count level about same. Low ppm Am-241 on samples leaves question about whether positive lung count due to prior exposure. Relayed qualitative information of this nature to [Name]. Asked them to hold him out of the area until better definition is given – probably early next week.

6/24/69: Page 49 – Body counted from 779 incidents. [Name], [Name] [Badge Number], [Name] [Badge Number], [Name] [Badge Number], [Name] [Badge Number], [Name] [Badge Number].

7/1/69: Page 51 – [Name] reports sign. lung count for [Name] [Badge Number] – and [Name] [Badge Number] gut or liver. Told [Name] about these [Name] said he talked to [Name] about 774 conditions.

7/28/69: Page 58 – Informed [Name] of high June exposures to [Name] (707 mrem, 687 gamma) & [Name] (1142 mrem all gamma).

7/31/69: Page 60: Fire in 771 on last nite's PM shift - ~ 11 PM can of oxide from 776 got hot enough to ignite plastic and tape outside of can. Contam. was spread to ~11,000 ft<sup>2</sup> of 771 plus the tunnel. A number of people from both PM and Mid shifts were sent to body counter (about 20).

8/14/69: Page 63 – [Name] [Badge Number] of S & W called relative to film badge issue. No...found men coming to 771 w '68 badges. Informed [Name] that neutron film not necessary, but concerned about old badges – called [Name] about this.

8/27/69: Page 67 – High levels of penetrating radiation from boxes in 777 west of dry room brought to attention of [Name] on B-26 & [Name] & [Name] today – Max reading at 1 foot is 80 mrem/hr. [Name] sent team in to inspect & re-distribute parts – plan to sent many to 771 as soon as possible – probably not before next Tuesday. Pulled 6 badges for special evaluation of doses. This matter brought up at [Name] meeting.

10/6/69: Page 74 – Called [Name] to see if he was aware of high doses to his people last 2 wk period. He felt this due to heavy work load & extend work week. Sent summary letter to [Name].

10/17/69: Page 75 – Notified [Name] about high exposure to [Name] – [Name] thinks due to film badge left at desk. Data does not support.

10/28/69: Page 77 – Discussed [Name] lung count w [Name] – asked him to get further study on this case. Suggested he be restricted if count is close to MPLB considering the assumptions made.

10/28/69: Page 77 – Notified [Name] that [Name] probably has at least 50% MPLB. Also told him we are not satisfied with venting of units in shed. [Name] to check on.

12/22/69: Page 87 – [Name] was exposed to an open port on X-ray diffraction unit in Rm 234, 779 Bldg. Film badge was pulled & showed very little exposure. Unit belongs to [Name]. I talked to [Name] – they have taped all of the unused ports shut for want of a long term solution.

3/24/70: Page 104 – In 776 – met w [Name], [Name], [Name], [Name], [Name] to discuss pen. rad exposure levels – largely resulting from improper spacing and line loading. All present agreed to correct problem. I indicated the other alternatives that would be used if problem isn't corrected.

- (1) Shielding will be recalculated and installed.
- (2) Areas above 2.5 mrem will be roped off and signs posted showing stay times per day.

4/20/70: Page 107 – Contam incident 777 from maint. Operation – compressed air blown into plugged line outside glove box released contam. About 12,000 ft<sup>2</sup> contam. to 25,000 cpm. Seven men sent to body counter. All negative.

6/10/70: Page 114 – Also notified [Name] of > 1343 mrem dose to [Name] [Badge Number] for same period. [Name] also to rotate him out.

6/24/70: Page 116 – Informed [Name], [Name], and [Name] of high hand exposures for April to 4 Assembly workers. 25 + Rem exposure to [Name], [Name], [Name], and [Name] were others. [Name] informed by [Name]. [Name] agreed to rotate out [Name] and [Name].

	April (Mar 15 to Apr 20)	Jan thru Mar	May-June
[Name]	25.724 Rem	7,505	1000
[Name]	17,794	1,172	
[Name]	8.004	1,799	
[Name]	8.964	2,455	

3/2/71: Page 139 – [Name] concerned about possible > MPLB exposure to [Name] on 2-23. Confirmed exposure probably occurred to low ppm Am mt'l – fresh oxide – however his wearing respirator and low pers contam. levels do not confirm a high air contam. situation.

3/72: Page 146 – Dosimetry has changed hand-to-wrist ratio to 1.5 to 1 for all 771 operations except 241Am work where it will stay 2.5 to 1. Neutron wrist dosimetry now in effect at 771.

Hand-to-wrist ratio studies are underway again in 776 & 707. Ratio at present is 5 to 1.

### **RFP Logbook 1-26-70 to 10-26-70 (Foreman Log)**

Page 80: 5-13-70 Gamma spec on [Name] [Badge Number]- Bkg.

Page 81: 5-14-70 Gamma spec on [Name] [Badge Number] - Bkg.

Page 93: 5-27-70 Gamma spec. [Name] right hand Bkg.

Page 130: 9-24-70 Gamma spec on [Name] [Badge Number].

### **RFP Logbook 9-2-70 to 12-24-71 (Foreman's Log)**

Page 3: 9-22-70 [Name] sent to Medical for decontamination and a body count. Body count Bkg.

Page 7: 9-28-70 [Name] [Badge Number] Medical restricted him from contaminated areas. Sent him home 6 hours sick leave.

Page 9: 9-30-70 PM left word that a number of gloves had holes on the south side of Line 41. We found contamination on the sides of the box 50K, on a spot check, the paint in the area had been stripped. In order to decontaminate this area, I feel we should have the floor painted and covered to avoid the contaminating the bare concrete floor.

While making bad cuts on the north end of Line 3, acid ran out at the end of the bad causing an acid burn to [Name] forearm as well as contaminating the floor area. This happened at 0500. [Name] was rinsed off but was not taken to Medical until 0600 due the fact that we did not have a nurse on duty until 0600.

Page 11: 10-2-70 1930 hours acid leak tracking contaminated all over the floor in Rm. 114. [Name] [Badge Number] received an acid burn on his right shoulder and left leg. Gamma spec. Bkg. Body Count Bkg. [Name] [Badge Number] had acid has been bagged and should be watched until it is repaired.

Page 19: 10-10-70 Entire shift spend in decon at mist tank area behind Lines 13 & 14, on H-6 vacuum system – (4) people sent to Medical this shift for future decon – (2) came back bandaged from excessive decontamination.

Page 23: 10-13-70 Incident Line #2 at approximately 2000 hours.

Routine production was being performed on Line #2 when a fire broke out in #3 pot followed by two minor explosions. The explosion caused the box to pressurize and cause contamination to be released into the area from the crit drains. This area was not on respirators at time of occurrence. All personnel involved were scheduled for body count with all results being negative. See accident and incident reports.

Page 25: 10-15-70 MID GFNO At approximately 2140 hours, CAM at 2 and #3 were activated. Monitors responded immediately and located a ruptured steam valve coming off of a condensate trap – Respirators were put on as soon as CAM activated. Overhead from Line 3 west over Line 1 to West wall running from 5,000 c/m to 20,000 c/m – North from Line 3 into 114 storage area 2,000 c/m to 5,000 c/m of lateral surfaces and floor – South of Line 3 for approximately 20 feet overhead 10,000 c/m; floor 5,000 c/m to 15,000 c/m - East of Line 3, along the front of Line 4 - 2,000 c/m – this was mostly tracking. In immediate area for about 100 square feet 100,000 c/m on floor and side of dry box. Only three operators were in the vicinity at the time incident occurred. Arrangements made to get them body counts. [Name] [Badge Number] – [Name]

[Badge Number] and [Name] [Badge Number])...(Daytime) Most of day was spent deconing around Line #3. Area is all cold except in back of Line #3. Approximately 400 sq ft of floor cocooned. The rest of the floor in back is 30K (PM) [Name] to medical for gamma spec. Results 0.002 ug.

Page 29: 10-19-70 Some combustible material inside Line 37 caught fire causing one of the day box gloves to melt releasing small amount of contamination. [Name] was operating at the time. Fire was extinguished by [Name] and [Name] and glove changed. [Name] will be scheduled for body count 0730 10-19-70.

Page 33: 10-21-70 Sent [Name] to Medical for gamma spec – puncture right knee.

Page 35: 10-23-70 Sent [Name] (Painter) to Medical for gamma spec. – several old cuts on finger tip.

Page 41: 10-29-70 [Name] [Badge Number] sent to body counter.

Page 51: 11-8-70 Gamma spec for [Name] [Badge Number] First thing results Bkg. ([Name] – write up the accident sheet on this.)

Page 94: 12-19-70 Special badges used by people on Line 17 bagouts.

Page 101: 12-27-70 Gamma spec for [Name] [Badge Number] at 0530.

Page 118: 1-14-71 [Name] [Badge Number] went to Medical for gamma spec. [Name] [Badge Number] to Medical for body count 2330 hours – possible exposure

Page 120: 1-15-71 Talked to all M.D. operations in the cafeteria on the proper procedure to wear the new TLD film badges.

Page 150: 2-13-71 Gamma spec on [Name] – Bkg.

### **RFP Logbook 2/15/71 to 7/23/71**

Page 2: 2-16-71 Took [Name] to medical for decon and gamma spec. on top of his head. Had an incident on line #2 – air lock operation.

Page 11: 2-4-71 [Name] - B-36 <1000% RCG.2000 c/m.

Page 12: 2-25-71 [Name] B-36 141 Nash pump vault 1175% RCG 3000 c/m.

Page 12: 2-26-71 Deconed on line 20.

Page 13: 2-26-71 [Name] 141 Mash pump vault 8000% RCG 20,000 c/m.

Page 18: 3-3-71 B36 Nash pump vault 2800% RCG 7000 c/m

B36 141 Nash Pump Vault 3100% RCG 4000 c/m.

Page 27: 3-13-71 Called [Name] out to body count [Name]. Contaminated while pulling a piece of tape off a pipe in the overhead at tank 218.

### **RFP Log July 24, 1971 to Jan 9 1972**

Page 105: 11/5/71 - Fire – Line 20 – Button Break out @ 1300. Handled by [Name], [Name] and [Name]. [Name] and [Name] to body counter. Platform and front of bay contaminated to 100 c/s. Heads OK.

### **RFP Log May 29 1972 to October 15, 1972 (Right side of logbook water damaged and faded – not readable)**

Page 15: 6-13-72 Do not send any PI a.m. samples to body count. Next week we will work out a safe handling and packaging procedure with [Name] – [Name].

### **RFP Logbook 10/16/72 to 3/25/73 (x)**

1-27-72: Page 49 – Window change Line 10 – [Name] [Badge Number], and [Name] [Badge Number] body counted. Not wearing respirators because signs had been removed on Lines 15 & 16.

### **RFP Logbook 3/20/74 – 9/23/74 (x)**

Page 80: 6/8/1974 - Incident @ Line 3. Many gloves contaminated. Find out who worked Mids sat at Line 3 and body count them if they were contaminated Sat night.

Page 73: 6-17-74 - Liquid spill in line 1. Very high gamma readings. People cleaning will receive very high hand exposures.

### **Contamination Control Logbook\_1982\_1985**

2/21/82: Page 10 – Did have trouble in OY Leach – [Name] took care of it. Possible inhalation on [Name]. Called shift super and got a Body count for him approx. 0145.

### **Falk Logbooks**

Two Falk logbooks: Almost exclusively his personal calibration and neutron spectral measurements. However, some interesting historical takes on n/p measurements in specific facilities. He also mentions U-237 as a key constituent.

### **Urinalysis Results Logbooks**

Special Analysis Logbook

325-78-0009  
325-78-0009a  
325-78-0009b  
325-78-0009c  
325-78-0009d  
325-78-0009e  
325-78-0009f  
325-78-0009g  
325-78-0009h  
325-78-0009i

**No significant findings were found in the following logbooks.**

RFP Logbook Jan 10, 1972 to May 29, 1972 (Foreman Log)  
RFP Logbook Apr 1987 to Sep 1987. Contamination Control Report Sheets  
Rad Exposure Letter Log  
Release History Unk 1956\_72

**References:**

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Hammond, S.E., 1965, *Logbook 9/19/65 - 5/14/69*, Dow Chemical Company, Golden, Colorado.

Kittinger, W.D., 1957, *Kittinger's Personal Logbook 10/1/57 - 8/26/60*, Dow Chemical Company, Golden, Colorado.

Kittinger, W.D., 1966, *Logbook 12-12-66 to 12-31-68*, Dow Chemical Company, Golden, Colorado.

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Kittinger, W.D., 1971, *RFP Logbook 2/15/71 to 7/23/71*, Dow Chemical Company, Golden, Colorado.

Passmore, R., 1982, *Contamination Control Logbook\_1982\_1985, 5/28/81 – 7/8/85*, Rockwell International, Golden, Colorado.

RFP (Rocky Flats Plant), 1966a, *Logbook 12/5/66-6/11/67*, Dow Chemical Company, Golden, Colorado.

RFP (Rocky Flats Plant), 1966b, *RFP Logbook 5/10/66-12/3/66*, Dow Chemical Company, Golden, Colorado.

## **ATTACHMENT 2: LOGBOOK REFERENCES TO OTHER RADIONUCLIDES**

### **Logbook 10/1/57 - 8/26/60 (Kittinger 1957)**

12-10-57: Page 9 - At 3:45 [Name] called to report an inadvertent Co60 exposure to [Name] in Bldg. 81 Radiography. He explained that the source had not been rotated completely under the shielding and [Name] had not followed instruction in use of the cutie pie. [Name] brought the film badge in for evaluation.

11-3-58: Page 51 - [Name] conferred with me about high air count trend in 233. He agreed to a special sampling program for this room.

10-21-59: Page 106 – Ir-192 source received by radiography – checked outside of container.

1-21-60: Page 118 – [Name] and I met with [Name] and [Name] at their request to discuss problems that might be associated with Th processing. Advised them bare processing possible with care given to mesothorium .... + exposures.

6-1-60: Page 139 – Bldg. 83 made hot breakdown on steel clad Th ingots in the afternoon. Cans broke on both ingots. Special air samples and smears were taken. [Name] reported no Th on smears from 1<sup>st</sup> can that broke on a qual analysis.

### **RFP Logbook 8/29/60-6/12/63 (Kittinger and Vogel 1960)**

4-3-64: Page 11 - Survey from 44 showed some Co60 contamination- highest was 5500 dpm from a cap used for pneumatic tube- 2 pigs and tubes also showed positive Co60

4-20-64: Page 11 - Conveyed to [Name] a request by [Name] that a permanent H3 sniffer be installed in 54 Bldg.

9-4-64: Page 20 - U233 Project postponed for 6 months.

3-24-65: Page 37 - Pit- No steamer- too cold (0 degrees) today. Thorium ingot in 83 Bldg. 80d/m, 75K direct.

4-27-65: Page 41 - Pit working on misc. Pu241 MPC Air 0.3 d/m/24hr RCG

4-28-65: Page 41 - Special project going well- first metal made early this AM

7-2-65: Page 50 - U233 Rc'd, unpacked, vented, repacked and shipped

8-23-65: Page 56 - U233 project started- thorium strike experiment in 86 started- handling procedures U.

9-17-65: Page 60 - Okayed 19, Np237 sample to 41 with HP surveillance and follow up.

10-12-65: Page 63 - [Name] Am project started- ADK

12-28-65: Page 71 - Started [Name] Pu project in 130....Talked to [Name] on 5mg Np237 sample to 41- he will bring written request over - for our approval.

1-10-66: Page 72 - Np project – No HP problems.

2-2-66: Page 76 - Rc'd proposal from [Name] on Am and Pu in 142.

2-11-66: Page 77 - Okayed [Name] Np project in 228

2-14-66: Page 78 - [Name] brought 5 gm Np into Bldg for project

2-15-66: Page 78 - Np project- slightly messy- no big problems

3-2-66: Page 80 - Checked in the 98 tunnel for summers- recommend lock on 50 curie RaBe source.

3-7-66: Page 80 - [Name] started Np237 project in 44...

3-21-66: Page 83 - Talked to [Name] on Np foil job in 81, 265.

3-28-66: Page 84 - [Name] to start Np rerun (1200 ppm Pu-238). [Name] down to talk about Np project- 265.

5-2-66: Page 90 - [Name] project (Am) started.

5-3-66: Page 90 - Okayed [Name] Np fluoridation in G-12.

5-18-66: Page 92 - Cm project started in 71.

1-13-67: Page 120 - Thorium strike on 233 completed today.

5-3-67: Page 131 - Np project started-81.

5-5-67: Page 131 - Slight Np spill in 264.

### **Logbook (1963 – 1968) - (8/1/63 - 3/18/68)**

8/27/63: Page 5 –

Microprojector reading more track 1.7 to 1  
Identifying film by Am not successful

Gamm counting by direction.

Stan - Pu-238 source problem

11/14/63: Page 13 – [Name] – Fabrication of U-233

**Logbook 3/26/65 – 10/18/65**

Page 8: 4-5-65 - U-233 mock run 201-630 DJC 900326-12 Charge 6.7 hr

Page 9: 4-5-65 - Charge for U-233 mock run 201-630 DJC 900326-12 6.7 hr today for [Name].

Page 33: 5-10-65 - U233 spill from PVC line (again) rm 114

**Logbook 12/5/66 – 6/11/67**

3/6/67: pg. 66 - Checked on film badge results for [Name] and [Name]. Reference future work with Cm in January.

**Logbook 12/12/66 –12/31/68 (Kittinger 1966)**

1-31-67: Page 11 – Worked with [Name] on specs. For special permission on radioactive mtl shipments. He agreed to exclude Am and Np from table showing criticality limits – to make separate table asking for quantity agreement only.

**Logbook 2/5/69 – 9/3/69**

6-17-69: Page 95 – TLDs being used on special Am job in Room 180F.

**RFP Logbook (4/3/68-9/15/71)**

Sept 11, 1968, page 11:

Pu isotopic content  
238Pu in 79 Building

October 30, 1968, page 17 - 236Pu running out.

April 9, 1969, page 31 - Am in waste barrels

April 7, 1970, page 47 -

Neutron dosimeters for SNAP – NASA  
Am243 from NCAR

April 28, 1970: Page 49 - Americium release

### **RFP Logbook 9-2-70 to 12-24-71 (Foreman's Log)**

Page 1: 9-22-70 – Checked tritium detector in Bldg. 54. Detector indicated an alarm condition. We had problems with the detector over the weekend also. It seems there is a short in the electrical.

Page 126: 1-21-71 Special experiment involving a high neutron source of californium-252 in Rm. 174B, contractors are working in this area and in the area of neutron radiation that is roped off. This beam penetrates the device at the rate of 3815/rem [number not clear] neutron and 2 mr/hr gamma. All of this beam is roped off. [Name] of Delv contractors coordinator OK'd this arrangement.

### **RFP Logbook 2/15/71 to 7/23/71**

Page 29: 3-15-71 There is not a tritium detector in 54 Building. Only empty tritium cylinders are stored there. [Name] does not want to set up the portable sniffer set up there because it is the only one we have. Security is going to discontinue clock counts in 54 Building until we get the detector back in service. Security will call HP if they do need to be in the building asking us to cover with the portable sniffer.

### **Contamination Control Logbook\_1982\_1985 (5/28/81-7/8/85) (Passmore 1982)**

2-5-82: Page 16 – It was decided to discontinue the search for the thorium source that were inadvertently put into the landfill dump. 77 sources out of 300 were recovered.

### **References:**

Kittinger, W.D., 1957, *Kittinger's Personal Logbook 10/1/57 - 8/26/60*, Dow Chemical Company, Golden, Colorado.

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RFP (Rocky Flats Plant), 1966, *Logbook 12/5/66-6/11/67*, Dow Chemical Company, Golden, Colorado.

## **ATTACHMENT 3: INCIDENT, FIELD MEASUREMENT, AND BADGE DESTRUCTION LOGBOOK ENTRIES**

**Logbook 10/1/57 - 8/26/60 (Kittinger 1957)**

1-20-58: Page 13 - Destroyed both exchange and permanent badges of [Name] [Badge Number], notified [Name] of security of intent. He asked for no formal notification of destroyer. I asked guard [Name] to witness, which he did at 9:10 a.m. Badges were cut into small pieces and placed in the hot waste can.

1-31-58: Page 15 - [Name] called to check and assignment of monitors to maintenance jobs. He felt [Name] assignment was unnecessary- but main gripe is with maintenance who insist on monitor coverage, I told him 81 pm monitor could give some degree of coverage, but might in some cases be unavailable. I also told [Name] that cleanup of equipment had never been thorough enough to declare the maintenance job needed no precautionary measures.

11-18-58: Page 53 – [Name] exchange badge found “hot” (visitor).

11-19-58: Page 53 - Visitor badge # 3 found hot. Both badges destroyed with [Name] permission by [Name] with [Name] in attendance. Asked [Name] to check pm men’s badges, he found 4 > 250 which were taken from the rack.

11-19-58: Page 53 - Asked [Name] to check all badges in the racks during his shift, he found 19 all form 81 > 250. Guards sent these down to H.P.

11-20-58: Page 53 - 5 badges of 19 unable to completely decontam. Got [Name] permission to destroy. Letter written for [Name] sign, concerning destroying of 11 exchange badges described above safety meeting- 81 H.P.

1-31-59: Page 64 - [Name] Badge (permanent F-26) was destroyed because of contamination level.

2-11-59: Page 65 - Destroyed 81...badge for [Name].

2-12-59: Page 65 - Destroyed [Name] permanent badge

4-10-59: Page 74 - Destroyed contamination exchange badge- [Name].

9-9-59: Page 101 – Badges found hot and destroyed:

[Name]	319-123	Perm & Exch.
[Name]	319-139	Perm & Exch
[Name]	181-268	Perm & Exch

Guard [Name] witnessed the badge destruction.

10-12-59: Page 104 – [Name] started 3<sup>rd</sup> shift today – to last only this wk. [Name] checked all exchanged badges in the clockroom on the 3<sup>rd</sup> shift – found 34 to be contam.

10-13-59: Page 104: [Name] informed of the large number of badges that were found contam. He agreed to try to work toward a different badging system that would not require personnel to wear them in the area. He asked that [Name] be notified and his assistance enlisted to get Security to adopt a new system. I contacted [Name] with [Name] approval. [Name] is somewhat interested in the possibility of a film badge type substitution.

10-14-59: Page 105 – Consulted [Name] and [Name] about destru of contam badges. [Name] took down ... telephone the entire list – both exchange and perm badges were requested – and agreed to make-up new badges before...old were destroyed. [Name] agreed to turn over all of the old badges to ... for destruction.

10-26-59: Page 107 – Perm. Badge of [Name] destroyed.

11-9-59: Page 108 – New exchange badge system instituted – perm badge not worn in ....

3-29-60: Page 130 – Began study of 235 air contam. problem

6-14-60: Page 141 – Conferred with [Name] at his request concerning plant for facilities to handle chem. processing of normal U. Recommended ventil. about such as is used for Oy.

### **RFP Logbook 1962 Logbook Special Samples**

This logbook involves special samples taken at the RFETS Mountain View Center and contains sampling results (often in c/m) at location numbers that run chronologically (i.e., S-60, S-61, S-62, S-63, S-64 etc.) often with smear and air samples taken at each location. Many are marked “WR smears”, “WR surveys”, and “WR survey” There is no information regarding dosimeters or other radionuclides (other than a cadmium air sample) and only a few entries, as noted below, for samples taken on specific individuals. Some samples are identified as EU sources.

### **Log Book 6-20-63 thru 10-27-67 (Kittinger and Vogel 1963)**

6-24-63: Page 3 - [Name] asked permission previously was ok, and began today a short analytical run of about 20 grams of Oy samples in 41 Bldg. Air sampling and control procedures were setup.

3-11-64: Page 10 - Met with [Name], [Name] and [Name] in 233 foundry plans, [Name] not much in favor of portable down draft units

4-28-65: Page 41 - Special project going well- first metal made early this AM  
[Name] 2hr EL

Special project 24 hrs behind schedule at end of day shift. PM OT cancelled - to await fluorination cycle, poor yield/ button.

5-4-65: Page 42 - Special project badges to 23.

6-4-65: Page 47 - U. contamination. Drinking fountain showed up at 91- from salvage- to be discarded

7-7-65: Page 51 - Talked to [Name] Re: Nitric Tu bath - he agreed to shut down till proper ventilation is available.

10-15-65: Page 63 - Talked to [Name] on Pu Sludge project- 229

2-28-66: Page 79 - Tu fire in 296.

6-21-66: Page 96 – Gamma alarm evac. At 2:00 PM. Good test. 72 people w/o film badges.

6-30-66: Page 98 - 233 going slow should finish making buttons tomorrow.

7-1-66: Page 98 - Small U fire in 81-244- no contamination sp.

6-1-67: Page 134 - Talked to [Name] about no neutron film in HP badges- says he will remedy.

### **Logbook 3/3/64 – 9/4/64**

3-10-64: Page 9 - Encouraged [Name] and [Name] to Develop a Method to feed calciner Automatically rather than by hand (neutrons 200 to 300 n/cm/me) Neither seemed interested

3-19-64: Page 18 - [Name] [Badge Number] incident: His coveralls were > 100,000 c/m inside and outside. Under shorts found in locker room were to 6,000 c/m (wearer unknown). [Name] found [Name] shorts and button to be BKGD when checked at home. [Name] (Jump Foreman) and [Name] (guard) were present during survey. Survey delayed when 2 gas flow ins. in 76 and 2 in 23 were out of gas and weak batteries. See [Name] sheet for more details.

3-20- 64: Page 19 - Film badge racks installed west entrance.

4-20-64: Page 50 - Five in the line room 160. [Name] [Badge Number] was oxidizing samples the furnace had boom shut down for 30 min when [Name] [Badge Number] noticed a fire in the line in an ice cream carton Fire Dept came down. No personnel contamination noted. No contamination of area noted 05:20 hrs.

5/1/64: Page 60 - Special neutron and gamma survey for hall of calciner after cleanup still showed 275 n/sec/cm<sup>2</sup> with supposedly no mtl. in the....

5/7/64: Page 65 - Gamma survey of very full dry boxes in 77 Bldg. 7 boxes averaging 100 mr/hr outside/200 to 400 mr/hr in the gloves.

5-13-64: Page 69 - [Name] burned classified paper for [Name].

5-26-64: Page 78 - Several pinholes in dead transfer lines ~ end east CHEM line also several leaking valves and flanges decontam not completed.

6-2-64: Page 83 - Talked to [Name] about [Name] treatment of film badge. Also talked about destruction of numbers of accident report blanks at desk in Room 148 with obscene word scratched on top blank.

6-12-64: Page 91 -

11:45 Hrs 71 Bldg notified of accident in 76 Bldg [Name] went to 76 immediately

11:40 [Name] phone form 13 Bldg to inform us a [Name] (76 Bldg) was calling for supplied air Suite.

12:00 [Name] was protracted about the incident he said the office area at that time was cold

12:05 Contacted [Name] he requested all available monitor in 71 Bldg be sent to 76 Bldg the following monitors were sent as soon as possible

[Name] x 8

### **RFP Logbook 9/8/64-3--26-65**

9-22-64: Page 20 - [Name] [Badge Number] needs 2 new picture for his film badge old one 500 cpm.

1-19-65: Page 102 – Talked to [Name] about excessive gamma at the Am stripping box and F.R. Box Rm 114. In front of the columns reading to 250 mR/hr in glove port and up to 70 mR/hr in aisle 1 ft. from box. He is having 50 mil. Lead gloves put on and is going to look into a way to shield the column.

### **Logbook 3/26/65 – 10/18/65**

Page 39: 5-18-65 - Survey around old 146 flourinator shows up to 60mr/hr and 15-30 mr/hr

Page 60: 6-17-65 - 2- more separate glove failure incident on lathe 768 on this shift. Will contact [Name] to investigate operation in this box.

Page 68: 6-28-65 - Explosion in 13 lathe in Rm 182 contamination throughout room and into hall 196. Supplied air on north lathe bar room if personnel in supplied air evacuated by hall 193 and spread contamination to the read.

Page 72: 7-2-65 - Tank 736 behind new Am box reading 18,000mr/hr on bottom of tank covered with lead apron, should be shielded as well as 734,731, 737.

Page 80: 7-15-65 - Bag leaking on back side of Am box 600sq ft of floor contaminated to 10,000 c/m.

Page 81: 7-16-65 - Talked to [Name] about shielding tanks on the back side of am box okay he will take care of it Monday Tank 720 reading 1100mr/hr on bottom

Page 145: 10-8-65 - Contaminated Incident in Rm 180 Project

### **RFP Logbook 10/19/65-5/9/66**

11-19-65: Page 28 – Floor area behind old skull box contaminated to > 100,000 c/m. Back hallway to 50,000 c/m. Hallway has been cleaned. Floor behind skull has been wet down it will be cleaned at the end of the shift. Day shift will be asked by [Name] to get this area cocooned as soon as possible.

11-19-65: Page 28 – An area (10' x 4') at the south end of the skull box under the air lock was covered with plastic. After a short time the plastic was inflated with air that seem to be coming up thru a crack in the floor.

2-14-66: Page 91 – Started neutron integrating unit with film at Rm 148 Fluorination. Rate of exposure 50-70 mR/hr having trouble find a safe place to get up gamma integrator.

2-25-66: Page 99 – 01:45 a waste BB1 containing supplied air hot waste exploded. Blew the lid off and the contents of the BB1 caught on fire. Contamination spread over 100 sq/ft floor level not very high (2,000 – 3,000 c/m).

4-12-66: Page 132 – Fire in the incinerator plenum probably burned out 1<sup>st</sup> and 2<sup>nd</sup> stages of filters. No contamination noted outside of plenum.

### **RFP Logbook 5/10/66-12/3/66**

6/22/66: Page 32 – Destroyed picture badge belonging to [Name] [Badge Number] due to contamination.

8-27-66: Page 82 – Fire in the incinerator plenum. Two filters burned out. 1 in the 1<sup>st</sup> bank and 1 in the second bank. No contamination released. The exhaust stack out of the top of the incinerator was hot enough to set the insulation on fire.

9/21/66: Page 99 – About 5 or 6 gal. of green liquid was found on the floor in Rm 146. It was behind the dry wall partition and it had run out of a stubbed off exhaust line that was only taped over. It is believed that it ran out today when there was a power failure and the dry box vacuum was lost. Contractor blueprints and equipment is all contaminated. Air samples B-3 & B-4 > 100K. [Name] was called concerning possible day shift exposures. Attempts to decontaminate brought little if any results. Plastic used to cover the worst areas.

### **Logbook 12/5/66 – 6/11/67**

6-7-67: Page 142- Both fluorinators broke down. Oxides being stored in 114 fluor room. Area marked with do not letter signs total 19 mR/hr.

6-8-67: Page 143 – Talked to [Name] about tube strung from Am tanks to Am box to transfer Am feed. 150 mr/hr in aisle – 4 mr/hr. At operators desk. Also talked about shields to cover glove ports not being used.

### **Logbook 12/12/66 –12/31/68 (Kittinger 1966)**

1-10-67: Page 8 – Asked [Name] not to make projected addition to 77 a cold area based be, Tu, Oy and possible Pu storage in this area.

1-31-67: Page 11 – Worked with [Name] on specs. For special permission on radioactive metal shipments. He agreed to exclude Am and Np from table showing criticality limits – to make separate table asking for quantity agreement only.

8-4-67: Page 54 – Met with [Name] concerning possible project to make D-38 pellets in 05 Bldg. [Name] wanted to the work on bench top. Advised him regarding ventilation needs since this will be messy work.

### **RFF Logbook 6/12/67-12/29/67**

6-21-67:Page 9 – Fire in one of the pots inside Line #3 ~ 2000. Extinguished almost at once by [Name]. No personnel contam. And no release of contam. To atmosphere.

6-25-67: Page 12 – [Name] found liquid on floor a valve was not turned off (I [Name]. witnessed [Name] shutting it off. Cooling water level was just about up. Water was leaking from windows, bolts. Reported to [Name] at 0630.

6-26-67: Page 13 – Area around W Box and Button Breakout put on resp. because of high level contamination found. Between shielding on boxes & boxes themselves operators to start cleaning around Button Breakout.

6-28-67: Page 15 – Found 2 plastic wrapped pieces of material laying unattended and unmarked on top of desk near casting furnace in Rm. 182. Radiation level of 55 mR/hr at surface of each one.

6-29-67: Page 16 – Talked to ...about [Name] on 148 Flourinator judging from readings and study with neutrometers it would indicate 777 mrem of exposure in the past 4 days. Front of box without shielding 75 to 80 mrem - with shielding 35 mrem.

7-15-67: Page 30 – Talked to ..., [Name], [Name], [Name] about relocating film badge racks in 71 Bldg. It is ordered that the racks for maint. Labs, & R&D be left in the west dock area and that Metal. Production, Mfg. Tech, & HP be relocated to hallway north of ....

8-22-67: Page 56 – Two bags north end of chloride line one on desk 250 mr/hr and one on barrel 800 mr/hr. Posted signs around area.

9-11-67: Page 69 - Lathe in Rm 182, ZPPR, south side of box has no shielding. Surface of glass reads 20 mR/hr. Man working at this location.

9-11-67: Page 69 – [Name] called about small lathe fire in 44 Bldg. Working with ZPPR material. Told him to write possible exposure report & issue special urine sample to machinist.

11-21-67: Page 124 – I R columns loaded with Am feed. Windows to 310 mr/hr, gloves to 200 mr/hr, Bkdg. 3 ft. south of box to 25 mR/hr. Survey taken and sent to [Name], [Name], and [Name].

11-22-67: Page 125 – There is [Name] of ZPPR fluoride at the far south end of the Chem Line that reads 67 mrem/hr neutrons. A radiation sign has been posted at its location.

12-7-67: Page 134 – Took gamma and neutron survey of ALD's, Line 45. Middle of aisle at Line 4 12 mR/hr – site gauge 619 110 mR/hr and site gauge 617 70 mR/hr.

12-12-67: Page 136 – Survey taken of crusher-neutron levels excessive. Gamma levels at the windows on the ion columns to 22 mr/hr. Background at control panel. 3 mR/hr.

### **Logbook 1/2/68 – 7/5/68**

1/27/68: Page 22 – 0930 hrs. #3 Booster became plugged to such an extent that the Boiler Operator had to reduce the Vac. On Lines 21, 23, 30, 45, and 46 in order to have a minimum.

4/6/68: Pg. 77 - Overhead filters on Line 31 leaking again.

4/26/68: Page 93 – Talked to [Name] and [Name] about reading of 19 mr/hr at the north end of Am Line. Reading in the center of aisle at the evaporating process.

5/4/68: Page 100 – Fire at the 114 fluorinator. A shielding bracket was being welded and welding slag landed on an intake filter box and started a fire. Some contamination was spread, but I think more contamination was tracked from hot operations in Room 149 by people trying to leave the area.

6-4-68: Page 123 – A sudden squall that blew in from the east spread contamination from the rabbit pen on to the people working there and into Bldg 03 itself contaminating the inside of the Bldg to 10,000 c/m. Lunch boxes in the Bldg were also contaminated. All lunches were discarded and lunches were furnished to them. [Name] street pants were contaminated. to 500 c/m. They were cleansed up with tape. Also [Name]'s car was generally contaminated to 300 and 400 c/m on both the inside and outside. It was driven in to 74 Bldg. area and decontaminated. Operators were decontaminated. in Rm 169.

6/26/68: Page 139 – Checked area under Am holding tank outside and just north of 71 Bldg. Dirt is running 300 to 500 c/m – cement base directly underneath tank is counting to 5,000 c/m – plastic bad around piping coming out from bottom of tank is OK. Did not check out the top of the tank. Roped area off and marked same.

### **RFP Logbook 7/8/68-2/4/69**

8/16/68: Page 32 – Fire and explosion in Line #2 on day shift left south end of room highly contam. Cleaned up except for under line which was isolated with plastic. Plastic also laid on floor just alongside of Line 2. Floor under plastic needs paint.

8/16/68: Page 32 – Fire in Line 13 ~ 1730 – No contam. released to the area.

8/21/68: Page 35 – High gamma reading at the Am line desk was caused by a gauge failure that allowed Am feed to back up into a line that normally is cold. Condition has been corrected.

8/21/68: Page 35 – Talked to [Name] about Line 2 explosion on 8/16. He stated that they suspect the cause was a newly installed air line that may have had some oil in it and that oil got into the pot they have discontinued use of the air line pending further investigation on the incident.

9-19-68: Page 56 – [Name] got n &  $\gamma$  survey storage area N. Rm 114. >130 batches green cake stored because of Fluorinator shut down reading to 45 mrem/hr n and 4 mR  $\gamma$ . Area should be posted.

10-9-68: Page 70 – Talked to [Name] concerning the wearing of lead aprons for bag cutting – [Name] and [Name] have been refusing to wear lead aprons for bag cuts and have been hand carrying bagged out material.

10-16-68: Page 75 – Bag cuts at Line #4 by [Name] and [Name] without the wearing of lead aprons. Bags up to 48 mR/hr.

1-10-69: Page 134 – Talked to [Name] and [Name] about using TLD for exposures during repacking of ZPPR barrels. TLD will be furnished. The pen for repacking these barrels will be built in Rm. 146. The TLD will be in the middle desk drawer and will be read daily. The numbers to the outside.

### **Logbook 2/5/69 – 9/3/69**

4-24-69: Page 56 - Spill at Vac line around line # 10. Pipe fitters were cutting out 3 vac. [Name] when liquid ran out of pipe area was >100,00 c/m at spill to 4,000 c/m on floor in storage area and fluorinate area was wet down with KW and barricaded to prevent spread of contamination area still contaminated at end of shift requested pm shift wake

5-12-69: Page 70 - No production- (worked 76 fire all night at 76 Bldg plus decontamination 71 Bldg from 76 source

5-12-69: Page 70 - Decontaminated tunnel all night

5-13-69: Page 71 - [Name] to 76 one hell of a night decontaminating ,taking care of medical mtc jobs, clean up, you name it - "Time for Beer" have fun [Name].

4-11-69: Page 47 – Decontam. crew worked all shift on contam. area that resulted from the fire at K-2. Two and at times three monitors were needed on this job full time.

6-18-69: Page 96 - Let [Name] know of our dissatisfaction of upright for being used in tunnels

6-25-69: Page 101 – 2115 hrs criticality drain on line #30 ran over we only have cloth booties to use, material is running 146g/liter. At least 6 pr shoes contaminated to > 100 K. 3 chem. Operators sent to medical for decontamination.

7-11-69: Page 112 - Fire at K2 - I glove burned also line 18 was pressurized causing crit drain to over flow decontamination not completed on this shift

7-30-69: Page 125 – 2300 hrs an oxide fire in the 776-771 tunnel a separate special report will be written.

7-31-69: Page 126 - Held over – [Name] – [Name] – [Name] 4 hrs to help with decontaminating personnel and eqpt from fire in tunnel.

7-31-69: Page 126 – Decontaminated entire shift. Several personnel sent to medical for decontamination – to my knowledge no forms were made out.

8-3-69: Page 128 – All the oxide has been removed from the tunnel and stored for burning as they get to it.

### **RFP Logbook 8-13-69 to 8-28-69**

8-15-69: Page 5 - Scrubber floor in 154A. HP reports it is still hot. A roll-a-round ladder and a tool box washed. Ladder won't come clean, 20K smear, and will probably need painted or discarded. The metal box was not checked.

8-15-69: Page 6 - Worked 8 men in 154A using ten scrubbers and two pickups. Hot spot of 30K just south of pit and near east wall. Also 30K west side of seam that divides the south section of the room. We had monitor check every single bucket in the vault and all hot spots were cleaned. All not spots other than the floor as reported by the day shift were cleaned. In the vault, the floor is mostly 1-2K. A 4K hotspot was found on the north end of the second isle from the west end of the vault. The south end of the 3<sup>rd</sup> isle had a 4K spot. The 4<sup>th</sup> isle was not checked. We could have a problem with the large scrubber having a contaminated brush. All ladders and other misc. equipment were bagged up and removed from the room.

8-16-69: Page 6 - Scrubbed floor in 154A. Readings up to 50K. Column House into 100K

8-16-69: Page 6 - Cleaned in 154A. We used 409 with a vacuum pickup. We got new scrub brushed from supply and scrubbed the 409 (NOT) using the scrubbers (buffers) because the get hot too rapidly and re-contaminate. Using the pickup, we had 4 men dry down the floor quickly with chem.-wipes before the floor had a chance to air dry. This technique cleaned up spots of order 10K and we got the vault area and northwest corner down to 500 to 2000 c/m. Since the floor has been scrubbed four times by jump shift, we got permission to paper. We covered the vault and the northwest corner of 154A with brown papers. We covered the containers in the vault with new plastic bags.

### **Hammond Logbook 9/19/65 - 5/14/69**

Primarily compilation of attendance lists, vacation status, training and meetings, personnel issues, etc.

### **776 Building Logbook [May 26 1969 June 16 1969]**

No entries pertinent to data integrity, dosimetry, other radionuclides or secondary dosimetry reading were found. This is a narrative log that discusses shift and work starts and decontamination and cleanup instructions. No contamination levels or decontamination levels are recorded or discussed. No personnel dosimeter issues or exposure levels, in vivo, in vitro bioassay results are noted.

Page 69: 6-4-69 Do NOT use tri-sodium phosphate granules as cleaning agent.

Page 70: 6-5-69 Sodium bi-sulfate – two pounds per bucket of H<sub>2</sub>O. Scrub with brush, rinse off and dry.

Page 78: 6-12-69 Health Physics should outline a strict procedure on how to handle the face masks, hoses and waste ...out in the compressor room. When 5 or more masks are thrown in a bag together it's next to impossible to get them clean. If the straps and hose is kept out of the inside of the mask there would not be a problem.

Page 82: 6-13-69 Floors in S4 is OK to paint ASAP. This has been a hot spot – so let's get at it. We took all the insulation down from ducts and it was very hot. In checking the filter screen, we found that about 1/3 of them were hot. I think it would pay us to have a monitor check each one after the filter material is removed.

Page 85: 6-14-69 We worked in full face masks all night (9 men). We could not keep up washing, decontaminating and drying filters because they were checked often and found to be cold.

Page 86: 6-15-69 Still think everyone removing insulation should break off all fasteners. Somebody will be getting hurt if we don't.

**RFP Logbook 6/16/69-8/28/69**  
**Special Decontamination Crew Summer 1969 Fire**

7-4-69: Page 60 – it seems that in some places it is hotter in the cold areas than in the hot areas.

**RFP Logbook 9/4/69 – 3/3/70 (Foreman's HP Log Bldg 771)**

Page 57: 11-12-69 – Talked to [Name] and [Name] about the ten barrels of ingots that are being stored at Line 21. Also in the area was a ten gallon can containing sweepings and metal and carts of material awaiting processing. The barrels contain about 100 kg of ingots from nuclear safety and they read to 6.5 mrem neutrons and 9 mR/hr gamma at the surface. Ten gallon container to 7 mR/hr at surface. Average background in the area at 7 to 8 mR/hr. It was agreed to move the barrels into the 148 Fluorinator Rm. And make this Rm. a limited access area. It was recommended that other material brought into the area be shielded and that only one cart of material at a time be brought into the area.

Page 58: 11-13-69 – High Radiation Area around Line 8 has signs posted. [Name] advised of this situation and copy of gamma-neutron survey at this location given to prod. supervision.

1-23-70: Page 111 – There are five carts of parts stored on the south side of Rm. 141. Gamma to 80 mR/hr and neutrons to 9 mrem. Storage south of Line 21 – several containers to 10 mR/hr. Informed [Name] and hung radiation tags on the carts.

2-16-70: Page 135 – A radiation hazard sign was posted on the door to Rm 141. Outside surface of glass to 12 mr/hr. In the doorway with the door open reads to 90 mR/hr and 29 mrem. I'm sure it's much higher inside vault. There is a lot of green liquid on the floor.

**RFP Logbook\_Sept\_11\_1969\_Dec\_26\_1969**

Page 3: 9-16-69 Try having decon workers carry hand monitor for assembly area boxes (1~2) to check for contamination as they work.

Page 19: 10-14-69 Cigarettes and matches were found in the clothing cabinet. These items should not be in the area.

Page 21: 10-21-69 Started using full face masks after lunch today.

Page 23: 10-27-69 The gamma bdg. limit is 0.5 for boxes and *[illegible]*. The best way we have of staying below these limits is to be sure that all material steamed and foamed... before boxing or handling it. It is possible the boxes will have to be returned and repacked in *[illegible]* for counting if the box reading is more than the 0.5 allowed.

Page 26: 11-14-69 A prime concern of the decon operation is to keep contamination from getting outside the operating area. Therefore nailing of the boxes is important. 1. Apply glue thoroughly 2. Nail lid sufficiently to seal 3. box can be removed from the bldg. for the carpenter

for nailing or strapping. The boxes should never be removed from the building. Be sure all foreman get this word.

Page 28: 11-6-69 No smoking on the dock.

Page 29: 11-9-69 Please clean and seal areas that are marked on the chart barricaded area – 50K to 100K spots.

Page 31: 11-13-69 Be sure to check for classification in items that may be ready to box out.

**Kittinger's Log Book No. IV (1/2/69 – 3/28/72) (Kittinger 1969)**

1/22/69: Page 6 – Considerable number of people eating in 76 & 77 locker rooms. Need to re-examine our position on this policy. Practice of eating at break muddles our position.

4/3/69: Page 30 – High gamma ct from 2 dreams in 774 produced high personnel exposure during last film badge period 3/13-3/27.

Asked [Name] to investigate – drums were:

Neutron	Gamma
5 mrem	1,000 mR
4 mrem	1,000 mR
1.5 mrem	500 mR

5/11/69: Page 42 – 776 Fire

1/6/69: Page 89 – Informed [Name] there is some concern in 771 about lack of neutron film in some badges – also about monitors concern (especially [Name]) that infor. is being generated for job eval. Purposes by I.E. study.

2/5/70: Page 96 – I am concerned about possibility of accidental exposure from x-ray diffraction equipment. [Name] has consulted with [Name] about problems in 779. I asked him to write letter closing down to units in Rm 234 until satisfactory protection afforded. He has drafted a letter.

**RFP Logbook 1-26-70 to 10-26-70 (Foreman Log)**

Page 24: 2-25-70 [Name] and [Name] held over or 8 hours for gamma/neutron survey.

Page 39: 3-16-70 Talked to [Name] about contaminated piping ductwork- general overhead of 777 checkout hallway. [Name] took smears up to 40K. [Name] will notify [Name] to decontaminate same.

Page 42: 3-20-70 Called to Bldg 444 to investigate fire in collection box in basement – west of HP vac pump – check everything for both. Be --- and --- and could find none. Called in [Name] to complete operation.

Page 49: 4-1-70 Informed [Name] (Captain Fire Command) to instruct his people about our rules in Bldg 776, 777, and 778 following incident with guard [Name] who was found in 77 without safety glasses, respirator, film badge and security badge – He said he would cooperate with HP.

Page 50: 4-2-70 Very exciting evening. Heat detector alarms in Rm. 154 went off twice during shift. Screwy situation occurred in 559 concerning outside emergency lights. Will discuss this incident with [Name] when I come in 4-7-70. [Name] jumped off foundry dock and injured his left foot.

Page 52: 4-6-70 Much discussion about the lack of monitor coverage in the south machining decon area. Had 4 decon monitors for area to take care of decon crews. Maintenance wanted for window chargers and [Name] wanted it for glove changers. Hard to Cover.

Page 79: 5-12-70 Sheet metal dropped duct in 5-5 causing quite a release of contamination up to 500K – scrubbed but needs rechecked.

Page 87: 5-21-70 Still having problems with monitor coverage for maintenance holding over for 4 hours. Two jobs turned in and no prior arrangement were made. Let's get this straightened out once and for all.

Page 112: 6-23-70 Contamination on the North furnaces coming from the control panels and not from the fire area.

### **RFP Logbook 9-2-70 to 12-24-71 (Foreman's Log)**

Page 1: 9-21-70 Spent part of this shift decontaminating Line 17. Not having much success. Should be completely surveyed.

Page 2: 9-22-70 Decontaminated around Line 45 all night. Incident occurred at the end of PM shift. While checking for source of contamination, located 3 windows that were possibly leaking, #1, #25 and #28. Also located 8 gloves that were rotten on the back of box. Area is still on resp. and needs more decontaminating.

At the beginning of the shift [Name] and I toured the production areas. There were an unnecessary number of drums that were stored at S. end of 149. These drums are contributing to possible radiation exposures. Approximately 12 of the drum (about ½) were all monitored ready for barrel count. [Name] started moving them over to barrel count. Suggest [Name] be informed of this condition.

Incident report written on these (2) incidents and also on leaking flange behind Line 34.

Page 9: 9-30-70 PM left word that a number of gloves had holes on the south side of Line 41. We found contamination on the sides of the box 50K, on a spot check, the paint in the area had been stripped. In order to decontaminate this area, I feel we should have the floor painted and covered to avoid the contaminating the bare concrete floor.

Page 10: 10-1-70 Incident at Line 5 greeted us at 2330. See Report. Kept having contamination problems around Line 3 most of shift. Thorough survey made and found several windows with yellow or lead tape on bottom hold down strip. All windows under tape smear 40K or more. Talked with [Name] about the condition, suggested that the windows be changed. Also found quite a few rotten gloves on backside with liquid in them.

Page 10: 10-1-70 - PM [Name] and [Name] found a 55 gallon drum in Rm. 162 giving off 100 mr/hr. It is tagged as empty 1 gallon cans – 2-16-70. Looks like plastic cartons with sludge in them.

Page 12: 10-3-70 - Gasket was changed in duct by Line 3. Floor has been cleaned a number of times but still comes up hot (3-5K). Floor was painted on mid-shift. I feel the contamination is coming up through the paint. They are scrubbing area one more time before end of shift.

Page 15: 10-6-70 - Found 500K c/m behind shield on Line #2 at bag out. Shielding was taken off and decon begun.

A seam is leaking behind Line #3. It is smearing  $10^6$ . Floor is also smearing  $10^6$ .

Page 15: 10-6-70 [Name] came down as steward for [Name] grievance for ½ hours pay for monitors working directly with decon people.

Page 16: 10-6-70 Gamma-neutron survey taken around fluoride volatility line as requested by R&H.

Page 19: 10-10-70 Decontaminating Rm. 11A all shift due to MR6 spill at mist tank area. Contamination now confined to immediate area. Strippable paint was put down after several washings to prevent contamination from spreading again.

Page 23: 10-13-70 Still having problems with Line 17 airlock. Shielding should be removed and airlock decontaminated.

Page 24: 10-14-70 Area around Line #2 was decontaminated. The area inside plastic pan was cocooned but not stripped because it was not dry. Respirator area covers Lines 1, 2 and 3. CAMs holding steady – 15-20K on cocoon and spots to 800K.

Page 31: 10-20-70 It has been two weeks since the H&G valve leak by Line 14 occurred and no efforts are being made to clean this area. Looks like we are going back to pre-strike attitudes by Production. (Cover it up with plastic and forget it.

Page 31: 10-20-70 Found a cart with (4) bags cut out of Line #30 at the North end of the line. The gamma radiation runs from 20 mr/hr to 100 mr/hr. We put a No loiter – High Radiation Area sign on the cart.

Page 42: 10-3-70. It's been 3 weeks since the H-G valve incident had occurred behind Line #14 and no further decontamination activity efforts have been made since the area was covered with plastic and cocooned. Discussed the hand carrying of high gamma FR waste from 114 storage to Line #4 with [Name] and [Name]. Advised them to either cart the material over to Line #4. Operators wore lead aprons or shut the operation down.

Page 43 10-31-70 Line #3 seam is leaking – It was checked and it's reading 500K c/m. Line was not decontaminated on days.

Page 52: 11-9-70 Toured the area at the beginning of the shift and the place is back where we were prior to the strike – contaminated be covered over with plastic or cocoon and the general area housecleaning is poor.

Page 61: 11-19-70 Talked with [Name] and showed him gamma and neutron exposure problems in the area of Lines 15, 46, 47, and 48. Such things as badged items lying on the floor during cutting operation (to 50mr/hr) Luc TE cart shielded cart with FR sludge in the pots, dirt fluoride laying on the floor and covered up with lead aprons. Apparently have some confused people around. Well cover this subject at their re-indoctrination that is coming up.

Back side of line 3 is hot – evidence of someone surveying and marking trouble spots, but area was not posted for respirators and contaminated floor.

Page 79: 12-4-70 AM Another big spill at line 14 just about the time the vac trap leak at Line 13 was near completion on cleanup. Condensate return line sprung a leak and recontaminated entire area; air samples A-10, A-11, A-122, A-13 and A-14. Made specials. A-14 was 80,000 c/m. Only good thing, this shift was that everyone in the area was on respirators. Still working on the prior mess when this happened.

Page 124: Asked [Name] to rotate his people on barrel splitting for exposure control – he agreed to do it.

Page 126: 1-21-71 Note- this is a must – refers to 1-7-71 Memoranda – Effective today, all respirators having 771 for laundry will be monitored and bagged separately. Hot from cold – all bags will be properly identified as the activity of the contents – Signed [Name]. (All shifts – each shift).

Page 128: 1-22-71 High gamma problem exists on and around east side of Line 40 – Survey shows that exposure is great on west side when operator is working through gloves – most gloves are 30 ml PG – suggest that entire box go to 50 ml PG – Walkway on east side of box as high as 10 mrem, west side walkway 2.5 mrem. Posted east walkway.

Page 134: 1-28-71 [Name] and [Name] – I could not find a incident report on the vac line leak atline #7. Deconed in area; all shift –leak was repaired at 2200 hrs, overhead in front of line deconed by end of shift.

No incident report on line 14 either – besides what was indicated on the map; we found a leaking window and approximately 40 sq ft. of the box to 50,000 c/m cleaned up by 2230 hours and window strip is taped with lead tape. Production supervisor promised to get it changed right away. This leak was the source of all contamination there.

Page 136: 1-30-71 PM shift [Name]. Stirpped the cocoon at the south end of tunnel. Count was reduced to 50,000 c/m direct and 1,000 c/m smear on the bare concrete. Epoxy was applied.

### **RFP Logbook 2/15/71 to 7/23/71**

Page 3: 2-10-71 Decon on Line Complete. Floor needs to be stripped + painted. Floor is 500 c/m smear plus 50K c/m.

Page 11: 2-4-71 Contamination released from bag cut at line 15 about 4ft<sup>2</sup> of floor. Decon completed.

Page 11: 2-4-71 Floor area on the West end of line 4 to 2K c/m. Pen which is around site gauge at 40K c/m outside perimeter. Respiratory area in all of West half of room and in flowmeter room.

Page 11: 2-4-71 [Name] - B-36 <1000% RCG.2000 c/m.

Page 11: 2-4-71 Maintenance job completed on line 11. Area has been deconed.

Page 12: 2-25-71 [Name]. B-36 141 Nash pump vault 1175% RCG 3000 c/m.

Page 12: 2-25 -71 Incident on line 38 – decon completed. Incident on line 20 – decon not completed. The east end of line 32 started leaking in several places. A pen was build around the east end.

Page 12: 2-26-71 Deconed on line 20.

Page 13: 2-26-71 [Name] 141 Mash pump vault 8000% RCG 20,000 c/m.

Page 13: 2-26-71 Plastic house at line 32 should be checked each shift to ensure contamination from leaks is not moving and that respirator area is sufficient.

Page 13: 2-27-71 114 Flourinator back side on respirators – Front decon complete. 148 Flourinator decon complete 0200.

Page 15: 3-1-71 Contamination to the Main Hall and Rm 114. Smith West area from line 14 south and west part of line 2. Due to liquid in a glove at line 4. Contamination spread due to tracking.

Deconed on line 17

Deconed on line 18

Deconed on line 32

Deconed on line 4

Page 16: 3-2-71 Decon of area from line 4 incident (5-1-71) completed at 0200. Decon of 148 fluorimeter completed at 0315.

Page 17: 3-3-71 Decon of 148 fluorimeter complete at 0100

Page 18: 3-3-71 B36 Nash pump vault 2800% RCG 7000 c/m

Page 19: 3-4-71 Back side of line 3 south end contaminated to 30K c/m. Contamination was spread due to tracking to the walk way on the north side.

148 fluorimeter in walkway around box is leaking at side of box and floor – is contaminated to 20K... Shielding should be removed and a complete survey should be done on the box, and overhead. Area is on respirators.

Page 19: 3-5-71 Decon of line 13 & 14 (PM incident) Floor contaminated to 200K c/m and shielding contaminated in the air lining. Had them remove the shielding and decon – also had some windows leaking 100K c/m.

Line 3 contaminated due to bag leak. Floor on back side and front side of North was decontaminated. Shielding at back side of North end 70K c/m. Area on respirators. Decon completed at 0700.

Page 24: 3-10-71 We had a spill on 4 line when [Name] pulled off his glove. The ladder he was standing on slipped and he fell back pulling off his glove. Floor box and ladder 100K c/m. Area deconed except for floor directly under glove – this has been cordoned.

Page 25: 3-11-71 Contamination around line 37 due to barrel dump. Contaminated dust was released to the atmosphere due to lack of flow on the Down Draft. Top of box, overhead pipes and floor contaminated to 10K. Decon completed at 0315. Exhaust system from the Down Draft should be checked.

B36 141 Nash Pump Vault 3100% RCG 4000 c/m.

Page 27: 3-1-71 Line 30 decontaminated at 0300. A dog was placed around the elbow and coupling. The floor below was leading into 60K...the elbow did not appear to be leaking, however a periodic check should be make.

Page 28: 3-14-71 Many valves and flanges were found to be leaking, in addition to the one on Tank 467. They should all be repaired before coming off respirators.

### **RFP Logbook 2/15/71 to 7/23/71 (Kittenger 1971)**

2/23/71: Page 9 - Line 32 incident due to a glove port leaking and contaminating approximately 100 ft of floor to 10K. The glove port was tightened and decontaminated. They also put epoxy around the gasket. Window should be replaced. Decon complete at 0315.

2/23/71: Page 9 - Bag failure on Line 2 East end. Contamination to the floor in the immediate area >104. Walking on all sides of line 2 contaminated due to tracking.

### **RFP Foreman Log 1/7/71 – 8/18/75**

Page 1: 1-12-71 Workers argued that they were not put in respirators when contamination alarms sounded while striping paint when decontamination shielding and floor in Rm. 114.

Page 23: 3-8-74 Talked with [Name] about not leaving his maintenance people without monitor coverage during his breaks and lunch.

### **RFP Log July 24, 1971 to Jan 9 1972**

Page 105: 11/5/71 - Shipped Pu-238 to 776 from [Name] R & D. Mat'l read 148.6 n + 22.0 gamma at surface. of inner container and 3.2 gamma + 35.7 n at surface. of shipping container, and 0.4 gamma + 4.4 n at three feet from the container. [Name].

### **RFP Logbook 10/16/72 to 3/25/73**

1-9-73, Page 91: - As of the meeting today, in 776, send no air samples of any kind to 776 that are > 5000 c/m. We all know that the only way we can be sure is to check all the A + B routes, Incinerator. Buster III and any area of which we have had suspect – [Name].

### **RFP Logbook 8/30/73 to 3/19/74**

12-3-1973: Page 79 - Special study started on CAMs vs Radeco in 149 and 114. If CAM or Radeco alarm at location A5, A6 A10, B21 or B25 please change both samples and make specials out of both samples. The sampler in the Radeco is out routine sampler. Now the Air Hero is discontinued.

1-18-74: Page 117 - Contamination of unknown origin ([Name] exposure incident) at 500 series tank has been checked periodically and still no signs of leaks. Keep a close check on this area.

2-5-74: Page 133 - High neutrons in BBD area caused from fluorides being stored in Line 19 near "W" box. 1 count from surface of box (window #12) 50.0 to 90.0 mr/hr neutrons – 152G way – to 18 mr/hr neutrons. Area put on radiation zones.

2-15-74: Page 142 – Small incident at Line 45 (3 sq. ft. floor 100 K/s) No report. Incident on Line 41 (airlock operations).

2-20-74: Page 146 - The support duct running from 147 to the 141 vault is open now. Under no circumstances should the hallway door to the 141 vault be opened. It could create a pressurized condition and could contaminate 147 again.

### **RFP Logbook 3/20/74 – 9/23/74**

Page 31: 8/14/74 – Incident Line 17 one possible inhalation. Glove failure.

Page 38: 8-7-74 Air hoods, B16, B17, B-32 have been hot for a week. We surveyed the area and found many contamination areas. 300K under Line A. put on respirators. See map for problem areas.

Page 45: 7-29-74 Lines 13, 14, 15, 16, 17, 8, 9, 10, 11, 12 put on respirators due to underline contamination found on the underline survey, unable to decon it on PMs.

Page 58: 7/11/74 – Incident on Line 24 – See report.

Page 73: 6-17-74 - Liquid spill in Line 1. Very high gamma readings. People cleaning will receive very high hand exposures.

### **Contamination Control Logbook\_1982\_1985 (5/28/81-7/8/85) (Passmore 1982)**

3-3-83: Page 50 – Chip problem 444 – Booties create more problem than solving.

### **RFP Logbook Contamination Control Logbook Nov 1985 to March 1986**

No entries pertinent to data integrity, dosimetry, other radionuclides or secondary dosimetry reading were found. This is a Foreman's logbook recording unusual findings and actions taken. Entries discuss respirator use, leaks, smears taken, PPE needs, contamination events with c/m levels found. Entries are sketchy and most log pages are only one-half full with most being 1-3 lines per entry. No personnel dosimeter issues or exposure levels, in vivo, in vitro bioassay results are noted.

### **RFP Logbook Inspection Log May 1997 to Jan 1998**

No entries pertinent to data integrity, dosimetry, other radionuclides or secondary dosimetry reading were found. This logbook documents inspections done on a daily/shift basis. The inspections include: leaks or drips, alarms, sump levels, pipe cuts, pump inspections, inspection of the Mound site, pumping operations, tank inspections, and inspections of the Building 903A and 903B areas for leaks or drips. Log entries are 3-8 lines in length and most pages are nearly full. No contamination levels or decontamination levels are recorded or discussed. No personnel dosimeter issues or exposure levels, in vivo, in vitro bioassay results are noted.

**No significant findings were found in the following logbooks.**

RFP Logbook Jan 10, 1972 to May 29, 1972 (Foreman Log)  
RFP Logbook Apr 1987 to Sep 1987. Contamination Control Report Sheets  
Rad Exposure Letter Log  
Release History Unk 1956\_72

**Logbooks that did not contain significant field data.**

Logbook Building 771 Fire 1957  
RFP Logbook 2/5/69 – 9/3/69  
RFP Log May 29 1972 to October 15, 1972  
Contamination Control Logbook\_1982\_1985  
RFP Logbook 2/5/69 – 9/3/69  
RFP Logbook 8/29/60-6/12/63  
Logbook (1963 – 1968) 8/1/63 - 3/18/68  
RFP Logbook (4/3/68-9/15/71)  
RFP Logbook 2/5/69 – 9/3/69

**References:**

Hammond, S.E., 1965, *Logbook 9/19/65 - 5/14/69*, Dow Chemical Company, Golden, Colorado.

Kittinger, W.D., 1957, *Kittinger's Personal Logbook 10/1/57 - 8/26/60*, Dow Chemical Company, Golden, Colorado.

Kittinger, W.D., 1966, *Logbook 12-12-66 to 12-31-68*, Dow Chemical Company, Golden, Colorado.

Kittinger, W.D. and Vogel R.M., 1963, *Logbook W.D. Kittinger/R.M. Vogel 6-20-63 thru 10-27-67*, Dow Chemical Company, Golden, Colorado.

Kittinger, W.D., 1969, *Kittinger's Log Book No. IV (1/2/69 – 3/28/72)*, Dow Chemical Company, Golden, Colorado.

Kittinger, W.D., 1971, *RFP Logbook 2/15/71 to 7/23/71*, Dow Chemical Company, Golden, Colorado.

Passmore, R., 1982, *Contamination Control Logbook\_1982\_1985, 5/28/81 – 7/8/85*, Rockwell International, Golden, Colorado.

RFP (Rocky Flats Plant), 1966a, *Logbook 12/5/66-6/11/67*, Dow Chemical Company, Golden, Colorado.

RFP (Rocky Flats Plant), 1966b, *RFP Logbook 5/10/66-12/3/66*, Dow Chemical Company, Golden, Colorado.

**Attachment 4 (Attachment 30 in RFP SEC Report):  
SC&A Determined Rocky Flats Plant Records Recommended for Review**

Receipt #	Bar Code	Record Type	Origin Date	Subject
18950	13583	17	2-Dec-93	HEALTH AND SAFETY TECH FIELD LOG BOOK PG
42320	8722008	89	10-Dec-73	321-72-101 - SPECIAL DOSE MEASUREMENTS USING TLD 07/01/1972 THRU 08/21/1972 / 321-72-103 - SPECIAL DOSE MEASUREMENTS USING TLD 08/01/1972 THRU 09/08/1972 / 321-72-104 - SPECIAL DOSE MEASUREMENTS USING TLD 09/01/1972 THRU 10/09/1972
				Beta-Gamma Film Badge Results (771, 776, 777, 779) - 1963-1968
				Beta-Gamma Film Badge Results (771, 776, 777, 779) - 1969
				Beta-Gamma Film Badge Results (771, 776, 777, 779) - 1970
20323	14223	17	16-Dec-93	BH RECORD 43193;PREWORK SURVEY; HEALTH AND SAFETY TECHN FIELD LOG BOOK DB;POST ACTIVITY SURVEY
38263	8076606	188	1-Jan-94	1995 AIR MONITORING LOGS / DECON FACILITIES DAILY ACTIVITIES LOG BOOK / 1995 DECON PAD DAILY INSPECTION CHECKLIST
38263	8076620	188	1-Jan-96	1996 AIR MONITORING LOGS / 1/1/1996 - 10/9/1996 DECON FACILITY DAILY OPERATIONS ACTIVITIES, OBSERVATIONS, AND CONCERNS LOG BOOK
38226	8011442	32	19-Mar-91	CONTAMINATION CONTROL LOGBOOKS / BUILDING 707
68351			1991 - 1994	CONTAMINATION CONTROL LOGBOOKS / BUILDING 707
37795	22027	17	30-Aug-93	DECON HEALTH AND SAFETY LOG BOOK
37766	21600	17	13-Oct-92	DECON LOG BOOK
62098			1952 - 1993	DOE ROCKY FLATS PLANT GUIDE TO RECORD SERIES USEFUL FOR HEALTH RELATED RESEARCH PREPARED BY HISTORY ASSOCIATES (HAI)// THE DOSIMETER RESULTS RECORDS DOCUMENT EMPLOYEE AND VISITOR EXPOSURES TO EXTERNAL RADIATION. THE SERIES CONSISTS OF FILM BADGE WORKSHEETS, TLD [THERMOLUMINESCENT DOSIMETER] WORKSHEETS, FINGER RING RESULTS, AND COMPUTER-GENERATED BADGE SUMMARY REPORTS, ALL OF WHICH PROVIDE DATA ON SKIN, ARM, HAND, AND WHOLE BODY EXPOSURES ON A MONTHLY, QUARTERLY, AND YEARLY BASIS. EMPLOYEE INFORMATION INCLUDES NAMES AND IDENTIFICATION NUMBERS, DEPARTMENT AND BUILDING ASSIGNMENTS, AND DOSIMETER NUMBER. THIS SERIES ALSO INCLUDES GATE SIGN-IN SHEETS AND BADGE DATA FOR TOUR GROUPS AND VISITORS TO ROCKY FLATS. ACCESSION NUMBER 434-92-0059 HAS A FOLDER OF "HARSHAW WRIST DATA." WHICH

Receipt #	Bar Code	Record Type	Origin Date	Subject
				DOCUMENTS WRIST DOSIMETRY READINGS FOR EMPLOYEES IN ASSEMBLY, WELDING/ASSEMBLY, TESTING, AND 707 PRODUCTION CONTROL.
55672			1976	DOE ROCKY FLATS PLANT GUIDE TO RECORD SERIES USEFUL FOR HEALTH RELATED RESEARCH PREPARED BY HISTORY ASSOCIATES (HAI)// THIS SERIES CONSISTS OF WORKSHEETS AND NOTES WHICH WERE CREATED FOR A REPORT CONCERNING THE LINE 17 HYDROFLUORINATOR IN BUILDING 771, ROOM 114B. THE SERIES DOCUMENTS RADIATION MONITORING'S EFFORTS TO TRACE THE SOURCE OF RADIATION LEVELS THAT REQUIRED WORKERS ON LINE 17 TO WEAR FULL-FACE RESPIRATORY PROTECTION AT ALL TIMES. RECORDS INCLUDE SPECIAL TLD [THERMOLUMINESCENT DOSIMETER] RECORDS OF EXTERNAL DOSES (IN MILLIREM) FOR A SMALL NUMBER OF EMPLOYEES. ALSO INCLUDED ARE GAMMA-NEUTRON SURVEYS.
62098			1960 - 1962	DOE ROCKY FLATS PLANT GUIDE TO RECORD SERIES USEFUL FOR HEALTH RELATED RESEARCH PREPARED BY HISTORY ASSOCIATES (HAI)// THIS SERIES INCLUDES THE FOLLOWING: EMPLOYEE NAMES, MAN [EMPLOYEE] NUMBER, BADGE NUMBER, DENSITY READINGS, DOSES, AND DEPARTMENT NUMBER. BUILDINGS MENTIONED INCLUDE 71, 76, AND 91. RESULTS ARE GIVEN BASED ON USE OF VARIOUS FILTER MATERIAL, INCLUDING BR [BRASS], CD [CADMIUM], AND OW [OPEN WINDOW]. THE FILM BADGE WORKSHEETS MAY BE USEFUL FOR RESEARCHING DOSE COMPARISONS BEFORE AND AFTER THE FIRE. HOWEVER WORKSHEETS FOR 1957 ARE NOT INCLUDED.
17514	7819	213	4-Mar-70	ENVIRONMENTAL MASTER FILE (EMF)// CALL REPORT - FIRE SAMPLES* AUTHOR: WOODARD RW; ADDRESSEE: BARNES CW; BRIGHT WC; BRAMLET HL; KITTINGER WD; LINCK FJ; NATHESON LA; NAU RJ; SAMPLE WB; THOMPSON MA; WILLGING JF; WILLIAMS AK
33618	15649	213	24-Nov-65	ENVIRONMENTAL MASTER FILE (EMF)// CONTAMINATION LEVELS AND DECONTAMINATION ACTIVITIES SUBSEQUENT TO THE INCIDENT OF NOVEMBER 9 1965 BUILDING 71 AUTHOR: JOHNSON CR;KITTINGER WD; DOW CHEMICAL ROCKY FLATS ADDRESSEE: PUTZIER EA

Receipt #	Bar Code	Record Type	Origin Date	Subject
37796	24093	213	25-Oct-65	ENVIRONMENTAL MASTER FILE (EMF)// CONTAMINATION LEVELS AND DECONTAMINATION ACTIVITIES SUBSEQUENT TO THE INCIDENT OF OCTOBER IS 1965 AUTHOR: JOHNSON CR;KITTINGER WD; DOW CHEMICAL ROCKY FLATS ADDRESSEE: PUTZIER EA
31252	15162	213	8-Aug-69	ENVIRONMENTAL MASTER FILE (EMF)// ESTIMATE OF MATERIAL LOSS IN 771 TUNNEL FIRE AUTHOR: KITTINGER WD; DOW CHEMICAL ROCKY FLATS ADDRESSEE: THOMPSON MA
62500			1972 - 1995	ENVIRONMENTAL MASTER FILE (EMF)// GLOVE RUPTURE AT HYDROFLUORINATOR BUILDING 771 AUTHOR: UNKNOWN; DOW CHEMICAL ROCKY FLATS ADDRESSEE: NONE
62500			1973 - 1995	ENVIRONMENTAL MASTER FILE (EMF)// PROGRAM TO MEASURE BACKGROUND GAMMA RADIATION WITH THERMOLUMINESCENT DOS METERS (TLD) AT ROCKY FLATS PLANT AND ENVIRONS AUTHOR: TALLY RH; ADDRESSEE: BOSS MR; MANN JR; PUTZLER EA; TALLY RH; THOMPSON MA; WERKEMA GJ; WILLGING JF
31252	14811	213	9-Mar-70	ENVIRONMENTAL MASTER FILE (EMF)// PROGRESS ON FIRE SAMPLES* AUTHOR: WOODARD RW, MESHIMA J; ADDRESSEE: BRIGHT VC; KITTINGER WB; MATHESON LA; WILLGING JF; WILLIAMS AK; AGENCY: BATTELLE NORTHWEST
17514	10822	213	6-Nov-87	ENVIRONMENTAL MASTER FILE (EMF)// ROCKY FLATS PLANT ENVIRONMENTAL ANALYSIS AND CONTROL SAMPLING PROCEDURE TRITIUM AMBIENT AIR SAMPLING AUTHOR: PARICIO ML; ROCKWELL-ROCKY FLATS ADDRESSEE: BOKOWSKI DL; BOSS MR; CAMPBELL GW; LIBRARY; SETLOCK GH; STETSON WD; EMF
46471	000107950A	17	1-Jul-96	ENVIRONMENTAL RESTORATION MANAGEMENT PROJECT FILES // DECONTAMINATION OPERATIONS AND SUPPORT DAILY LOG BOOK / BUILDING/LOCATION: 903B
55660	000108805A	17	1-Jul-96	ENVIRONMENTAL RESTORATION MANAGEMENT PROJECT FILES //HEALTH AND SAFETY TECHNICIAN FIELD LOG BOOK / BUILDING/LOCATION: OU4
55660	000108806A	17	1-Jul-96	ENVIRONMENTAL RESTORATION MANAGEMENT PROJECT FILES // HEALTH AND SAFETY TECHNICIAN FIELD LOG BOOK / BUILDING/LOCATION: OU4
55660	000108808A	17	1-Jul-96	ENVIRONMENTAL RESTORATION MANAGEMENT PROJECT FILES // H&S HEALTH AND SAFETY LOG BOOK / BUILDING/LOCATION: OU4
55660	000108809A	17	1-Jul-96	ENVIRONMENTAL RESTORATION MANAGEMENT PROJECT FILES // HEALTH AND SAFETY LOG BOOK
55660	000108810A	17	1-Jul-96	ENVIRONMENTAL RESTORATION MANAGEMENT PROJECT FILES // H&S HEALTH AND SAFETY LOG BOOK

Receipt #	Bar Code	Record Type	Origin Date	Subject
44872	000059633A	17	1-Jul-96	ENVIRONMENTAL RESTORATION MANAGEMENT PROJECT FILES // HEALTH AND SAFETY LOG BOOK
43495	000059632A	17	1-Jul-96	ENVIRONMENTAL RESTORATION MANAGEMENT PROJECT FILES // HEALTH AND SAFETY LOG BOOK / BUILDING/LOCATION: OU4
55345	000108684A	17	1-Jul-96	ENVIRONMENTAL RESTORATION MANAGEMENT PROJECT FILES // LOG BOOK; GOLDER FEDERAL SERVICES; WATER OPERATIONS; MDF MAIN DECONTAMINATION FACILITY OPERATIONAL LOG BOOK NO 903B / BUILDING/LOCATION: MDF
46471	000107949A	17	1-Jul-96	ENVIRONMENTAL RESTORATION MANAGEMENT PROJECT FILES // MAIN DECONTAMINATION FACILITY DAILY LOG BOOK ER/RMRS/LB/97/218 / BUILDING/LOCATION: 903B
51086	000107951A	17	1-Jul-96	ENVIRONMENTAL RESTORATION MANAGEMENT PROJECT FILES // MAIN DECONTAMINATION FACILITY DAILY LOG BOOK ER/RMRS/LB/98/391 / BUILDING/LOCATION: 903B
51595	000107952A	17	1-Jul-96	ENVIRONMENTAL RESTORATION MANAGEMENT PROJECT FILES // MAIN DECONTAMINATION FACILITY DAILY LOG BOOK ER/RMRS/LB/98/402 / BUILDING/LOCATION: 903B
59556			1990	EXTERNAL DOSIMETRY REPORTS EXCLUDES INDIVIDUAL EMPLOYEE FILES / 1990 GATE CLEANERS / DOSIMETER DELIVERY AND PICK UP PAPERS / TLD READER CALIBRATION FORMS / TLD READER CALIBRATION WORKSHEETS / TLD READER QUALITY CONTROL FORMS / ECF GRAPHS / TLD RAW DATA EDIT / MEAN ECF DATA DETERMINATION FORMS / QC TLD IRRADIATION FORMS / ECF MEAN GENERATION / ECF IN MEAN UPDATE INFORMATION REPORT / ECF FAIL REPORTS / ECF DATABASE REPORTS / LABEL VERIFICATION REPORTS / ECF PASS REPORTS / PARAMETER DUMP REPORTS / READER NUMBER 1 CALIBRATION / DASE EQUIVALENT PROCESSING / BATCH ADDITION OF REFERENCE DOSIMETER / ECF DATABASE PASS REPORT 802 / ECF DATABASE PASS REPORT 809 / RAW DATA REPORTS
61268			1992	EXTERNAL DOSIMETRY REPORTS EXCLUDES INDIVIDUAL EMPLOYEE FILES // 1992 UD-710A TLD READER QUALITY CONTROL FORM READER #1-1\READER #1-2\ READER #1-3\ READER # 1-4
61268			1992	EXTERNAL DOSIMETRY REPORTS EXCLUDES INDIVIDUAL EMPLOYEE FILES // 1992 UD-710A TLD READER QUALITY CONTROL FORM READER #3-1 / READER #3-2 / READER #3-3 / READER #3-4 / READER #3-5 / READER #3-6
73170			2002 - 2005	EXTERNAL DOSIMETRY REPORTS EXCLUDES INDIVIDUAL EMPLOYEE FILES // FOLDER 2 EXTERNAL DOSIMETRY REPORTS WRIST MANUAL CALCULATIONS V AND V 01/30/2002
63069			1985 - 2000	EXTERNAL DOSIMETRY REPORTS EXCLUDES INDIVIDUAL EMPLOYEE FILES // FOLDER 3 EXPOSURE FACILITY MANUAL BLDG 126 11/18/1985

Receipt #	Bar Code	Record Type	Origin Date	Subject
68487			1995 - 2004	EXTERNAL DOSIMETRY REPORTS EXCLUDES INDIVIDUAL EMPLOYEE FILES // FOLDER 8 TLD READER STATUS SHEETS READER 1-2-3 11/22/1995 THRU 09/30/2004
10666	3803	17	30-Mar-93	HEALTH AND SAFETY LOGBOOK NOTES;HEALTH AND SAFETY LOGBOOK NOTES
19175	14154	17	9-Dec-93	FIELD RECORDS FOR BH 42593; HEALTH SAFETY TECHNICAL FIELD LOG BOOK 3/26/93 3/8/93
19004	14153	17	9-Dec-93	FIELD RECORDS FOR BH 42993; HEALTH AND SAFETY FIELD LOG BOOK
31252	14802	17	21-Dec-93	FIELD RECORDS FOR BH 43393; HEALTH & SAFETY TECH FIELD LOG BOOK
31252	14803	17	21-Dec-93	FIELD RECORDS FOR BH 43493; HEALTH & SAFETY TECH FIELD LOG BOOK
32776	15563	17	9-Feb-93	FIELD RECORDS FOR BH 44093;HEALTH AND SAFETY LOG BOOK NOTES 25 PAGES;HEALTH AND SAFETY LOG BOOK NOTES 3 PAGES
31255	15554	17	28-Dec-92	FIELD RECORDS FOR BH 44693; HEALTH AND SAFETY TECH FIELD LOG BOOK ENTRIES VR
37700	21377	17	29-Oct-93	FIELD RECORDS FOR BH 46593; HEALTH & SAFETY TECH FIELD LOG BOOK
37728	21378	17	2-Nov-93	FIELD RECORDS FOR BH 46693; HEALTH & SAFETY TECH FIELD LOG BOOK
37751	21379	17	2-Nov-93	FIELD RECORDS FOR BH 46793; HEALTH & SAFETY FIELD LOG BOOK
37766	22001	17	18-Nov-93	FIELD RECORDS FOR BH 46893; HEALTH & SAFETY FIELD LOG BOOK
37766	22002	17	19-Nov-93	FIELD RECORDS FOR BH 46993; HEALTH & SAFETY FIELD LOG BOOK
37795	22036	17	1-Jan-01	FIELD RECORDS FOR BH 47093; HEALTH AND SAFETY FIELD LOG BOOK
32429	15561	17	18-Jan-93	FIELD RECORDS FOR BH40293; HEALTH & SAFETY TECH LOG BOOK
32430	15562	17	28-Jan-92	FIELD RECORDS FOR BH41193; HEALTH & SAFETY LOG BOOK NOTES
31252	14953	17	10-Mar-93	FIELD RECORDS FOR BH43693; HEALTH & SAFETY TECHNICIAN FIELD LOG BOOK DB;HEALTH & SAFETY TECHNICIAN FIELD LOG BOOK ANE
31252	15551	17	10-Dec-92	FIELD RECORDS FOR BH44193; HEALTH AND SAFETY TECH FIELD LOG BOOK DH; HEALTH AND SAFETY TECH FIELD LOG BOOK VR
31252	15552	17	15-Dec-92	FIELD RECORDS FOR BH44393; HEALTH AND SAFETY TECH FIELD LOG BOOK DB
31252	15553	17	11-Dec-92	FIELD RECORDS FOR BH44593; HEALTH AND SAFETY TECH FIELD LOG BOOK VR
31255	15555	17	11-Jan-93	FIELD RECORDS FOR BH44793; HEALTH AND SAFETY TECH FIELD LOG BOOK VR
31255	15556	17	19-Jan-93	FIELD RECORDS FOR BH44993; HEALTH & SAFETY TECH FIELD LOG BOOK DB

Receipt #	Bar Code	Record Type	Origin Date	Subject
37796	52019	17	1-Mar-95	FIELD RECORDS FOR GEOTECH DRILLING BOREHOLES;OU4 HEALTH AND SAFETY FIELD LOG BOOK
37796	52020	17	2-Mar-95	FIELD RECORDS FOR GEOTECH DRILLING BOREHOLES;OU4 HEALTH AND SAFETY LOG BOOK
37796	52021	17	2-Mar-95	FIELD RECORDS FOR GEOTECH DRILLING BOREHOLES;OU4 HEALTH AND SAFETY LOG BOOK
37796	52022	17	2-Mar-95	FIELD RECORDS FOR GEOTECH DRILLING BOREHOLES;OU4 HEALTH AND SAFETY LOGBOOK
38016	52023	17	2-Mar-95	FIELD RECORDS FOR GEOTECH DRILLING BOREHOLES;OU4 HEALTH AND SAFETY FIELD LOGBOOK
38208	59633	17	18-Aug-95	FIELD RECORDS FOR OU4 HEALTH AND SAFETY LOG BOOK
38205	59632	17	11-Sep-95	FIELD RECORDS FOR OU4 HEALTH AND SAFETY LOG BOOK
				Health Division/Medical Department Reports for May-July 1969
				Health Physics Special TLD Data (1963-1995) (Some of these are listed above)
				Health Physics TLD Data (1971-1995)
SA2984				HISTORY FILES// FOLDER 4 PADC-1994-02630 RADIOLOGICAL DOSIMETRY EXTERNAL MANUAL TABLE OF CONTENTS
SC1738				HISTORY FILES// FOLDER 5 PADC-1994-02611 RADIOLOGICAL DOSIMETRY INTERNAL MANUAL T.O.C. RADIOLOGICAL DOSIMETRY INTERNAL MANUAL TABLE OF CONTENTS
SC1556				HISTORY FILES// FOLDER 7 PADC-1994-02630 RADIOLOGICAL DOSIMETRY EXTERNAL MANUAL T.O.C. RADIOLOGICAL DOSIMETRY EXTERNAL MANUAL TABLE OF CONTENTS
69169			1996 - 2005	HISTORY FILES// FOLDER 7 PRO-1703-RDE-0056 CALIBRATION OF THE PANASONIC UD-710A TLD READER SERVICE READER ACTIONS 01/01/1996 THRU 12/31/2005
SA2984				HISTORY FILES// PADC-2001-00062 RFETS INTERNAL DOSIMETRY PROCEDURE MANUAL ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE INTERNAL DOSIMETRY PROCEDURE MANUAL
				In Vivo/Wound Counter Logbook for 1969
42351	8830094	209	26-May-69	INDUSTRIAL HYGIENE & SAFETY HISTORICAL COLLECTION // FOLDER 3 POST 776 FIRE DECONTAMINATION ACTIVITIES DECONTAMINATION LOGBOOKS B776 05-26-1969 THRU 6/16/1969 AND 9/11/1969 THRU 12/26/1969
42380	8830095	209	16-Jun-69	INDUSTRIAL HYGIENE & SAFETY HISTORICAL COLLECTION // FOLDER 4 POST 776 FIRE DECONTAMINATION ACTIVITIES SPECIAL DECONTAMINATION CREW LOGBOOK SUMMER 1969 VOL 1 AND 2 B 776

Receipt #	Bar Code	Record Type	Origin Date	Subject
62512			1973 - 1997	INDUSTRIAL HYGIENE & SAFETY HISTORICAL COLLECTION /// 37 / OSA - 771.111 - HYDROFLUORINATION - DEACTIVATED 1992
10672	7382	17	21-Sep-92	LOG BOOK MDF 60 TECHNICAL DECONTAMINATION #2
10666	7381	17	4-Jan-93	LOG BOOK MDF 74 MAIN DECONTAMINATION FACILITY TECHNICIAN #1
10646	240	17	4-Mar-92	LOG BOOK NO 35 OU2 DECONTAMINATION TECHNICIAN 2 MARCH 4 1992 THRU JULY 9 1992
10646	234	17	6-Dec-91	LOG BOOK OU2 DECONTAMINATION TECHNICIAN 1 DECEMBER 6 1991 THRU JULY 23 1992
				Logbooks, Film Badge or TLD Data Related to ZPPR
55672			1963	MEDICAL OR HEALTH RESEARCH PROJECT CASE FILES // HISTORICAL HEALTH PHYSICS AND INTERNAL DOSIMETRY COLLECTION / / FOLDER 2 EQUIPMENT HISTORY FILES HEALTH PHYSICS CALIBRATION / BODY COUNT SPECIFICATIONS / BODY COUNT CRITERIA / BODY COUNT LETTERS / STATISTICS / SPECIFICATIONS INSTRUMENTATION / BODY COUNT HISTORY / G PG LAEL DATA / MANUALS BUILDING 22 ROCKY FLATS MECHANICAL / /TLD LOGBOOK / E L RAY COMMUNICATIONS / BODY COUNT DATA / LINEAR AMPLIFIER 04/19/1961 THRU 01/02/1963
62098			1963 - 1965	MEDICAL OR HEALTH RESEARCH PROJECT CASE FILES // HISTORICAL HEALTH PHYSICS AND INTERNAL DOSIMETRY COLLECTION / / FOLDER 3 EQUIPMENT HISTORY FILES HEALTH PHYSICS CALIBRATION / ELECTRO PHORESIS / TLD NEUTRON PAPERS / AM 241 GAMMA SOURCE / TLD GAMMA / GAMMA SOURCE / TLD NEUTRONS 2 / TLD NEUTRONS PUBE BACKGROUND IRON ROOM QCT 1963 / COMM ABOUT BC TO AND FROM UP5 / SPECS FOR STATE BODY COUNT / COMMUNICATIONS METRIY PACKARD ETC. / NEUTRON CALIBARATIONS / NEUTRON STUDY / GE(LI) COAXIAL DETECTOR STUDY / INTERLABORAATORY CALIBRATION EXCRCIRE (K BISHOP / D NEWTON / J RUMDO) 10/01/1963 THRU 10/22/1965
42315	8721736	89	27-Oct-67	MEDICAL OR HEALTH RESEARCH PROJECT CASE FILES // HISTORICAL HEALTH PHYSICS AND INTERNAL DOSIMETRY COLLECTION // FOLDER 2 VOGEL LOGBOOK KITTINGER / VOGEL LOGBOOK 06/20/1963 THRU 10/27/1967
42315	8721737	89	28-Mar-72	MEDICAL OR HEALTH RESEARCH PROJECT CASE FILES // HISTORICAL HEALTH PHYSICS AND INTERNAL DOSIMETRY COLLECTION // FOLDER 3 LOG BOOK KITTINGER LOG BOOK NUMBER 4 01/02/1968 THRU 03/28/1972
55672			1971	OCCURRENCE REPORTS / INVESTIGATION OF THE DISCOVERY OF PLUTONIUM IN THE BOTTOM OF HYDROFLUORINATOR GLOVEBOX
SA1215				PLANNING AND DESIGN FILES // CALC707NA000215 ASH / DRY- GAMMA DOSE RATE 707 / CALC707NA000216 ASH / DRY - NEUTRON DOSE RATE 707 / CALC707NA000217 ASH / DRY - GAMMA / NEUTRON DOSE RATE BASELINE 707 /
38226	8063531	32	13-May-	RADIATION MONITORING PROTECTION / B707 CONTAMINATION CONTROL LOGBOOK

Receipt #	Bar Code	Record Type	Origin Date	Subject
			95	(1994-1996)
38230	8075762	32	29-Jan-96	RADIATION MONITORING PROTECTION / B707 CONTAMINATION CONTROL LOGBOOK (1995-1996)
38226	8063528	32	8-Jun-95	RADIATION MONITORING PROTECTION / B707 FOREMANS LOGBOOK (1994-1996)
38226	8063530	32	11-Sep-95	RADIATION MONITORING PROTECTION / B707 FOREMANS LOGBOOK (1994-1996)
38226	8075761	32	31-Dec-95	RADIATION MONITORING PROTECTION / B707 FOREMANS LOGBOOK (1995-1996)
38263	8075764	32	1-Apr-96	RADIATION MONITORING PROTECTION / B707 FOREMANS LOGBOOK (1995-1996)
38226	8063527	32	10-Mar-94	RADIATION MONITORING PROTECTION / B991 CONTAMINATION CONTROL LOGBOOK (1994-1996)
38263	8215382	32	1-Jan-96	RADIATION MONITORING PROTECTION / BOOK #5 RCT LOG BOOK DAILY OPERATIONS (BLDG 400-800)AREA (1993-1996)
38263	8215379	32	31-Jan-93	RADIATION MONITORING PROTECTION / BOOK#2 RCT LOG BOOK DAILY OPERATIONS LOG (BUILDING 883)
38263	8215380	32	1-Jan-95	RADIATION MONITORING PROTECTION / BOOK#3 RCT LOG BOOK DAILY OPERATIONS (BLDG 400-800) (1993-1996)
38263	8215381	32	1-Jan-96	RADIATION MONITORING PROTECTION / BOOK#4 RCT LOG BOOK DAILY OPERATIONS LOG (BLDG 865) (1993-1996)
38263	8215383	32	1-Aug-96	RADIATION MONITORING PROTECTION / BOOK#6 RCT LOG BOOK DAILY OPERATIONS LOG (400-800) AREA (1993-1996)
38263	8215384	32	1-Jan-96	RADIATION MONITORING PROTECTION / BOOK#7 RCT LOG BOOK DAILY OPERATIONS (BLDG 444) (1993-1996)
38264	8215385	32	1-Jan-95	RADIATION MONITORING PROTECTION / BOOK#8; RCT LOG BOOK DAILY OPERATIONS (BLDG 444) (1993-1996)
68471			1994 - 1995	RADIATION MONITORING PROTECTION / CONTAMINATION CONTROL LOGBOOK
68475			1995 - 1996	RADIATION MONITORING PROTECTION / CONTAMINATION CONTROL LOGBOOK
62098			1996	RADIATION MONITORING PROTECTION / CONTAMINATION CONTROL LOGBOOK
38265	8255556	32	13-Nov-87	RADIATION MONITORING PROTECTION / FOLDER 2 LOG BOOK, DECON ROOM 779
38265	8226017	32	28-Apr-94	RADIATION MONITORING PROTECTION / FOREMANS LOG BOOK / BLDG# 776/777 (1994-1995)
38265	8226018	32	18-Feb-95	RADIATION MONITORING PROTECTION / FOREMANS LOG BOOK / BLDG# 776/777 (1994-1995)
55673			1979	RADIATION MONITORING PROTECTION / LOGBOOK
62500			1971 - 1990	RADIATION MONITORING PROTECTION // 16 BOOKS CONTAMINATION CONTROL RPT LOG BOOKS 1982 1986 1985 1987 1986 1988 1990 AND 1989 BLDG 771

Receipt #	Bar Code	Record Type	Origin Date	Subject
38265	8526748	32	1-Jan-71	RADIATION MONITORING PROTECTION // 16 BOOKS CONTAMINATION CONTROL RPT LOG BOOKS 1982 1986 1985 1987 1986 1988 1990 AND 1989 BLDG 771 (1971-1990)
62600			1981 - 1991	RADIATION MONITORING PROTECTION // 2 BOOKS GROSS ALPHA/BETA LOG BOOKS BLDG 881 6/11/1984 THRU 4/27/1988
62098			1970 - 1975	RADIATION MONITORING PROTECTION // 2 FOREMAN LOG BOOKS 776-777 6/15/1970 THRU 2/17/1975
38266	8562766	32	15-Jun-70	RADIATION MONITORING PROTECTION // 2 FOREMAN LOG BOOKS 776-777 6/15/1970 THRU 2/17/1975 (1969-1976)
62098			1957 - 1975	RADIATION MONITORING PROTECTION // 24 BOOKS FOREMAN LOG BOOKS BLDG 771
38265	8526485	32	1-Jan-57	RADIATION MONITORING PROTECTION // 24 BOOKS FOREMAN LOG BOOKS BLDG 771 (1957-1975)
62098			1970 - 1975	RADIATION MONITORING PROTECTION // 3 771 S. A. LOG BOOKS 06/24/1970 THRU 04/02/1975
62600			1976 - 1990	RADIATION MONITORING PROTECTION // 5 BOOKS SHIFT LOG BOOKS 1989 TO 1990 1987 TO 1988 1982 TO 1983 1984 TO 1985 1985 TO 1986 BLDG 771 (1976-1980)
38265	8526749	32	1-Jan-71	RADIATION MONITORING PROTECTION // 6 BOOKS CONTAMINATION CONTROL RPT FOREMANS LOG BOOKS 1971 1976 1983 TO 1984 1985 AND 1987 BLDG 771 (1971-1990)
38266	8562771	32	8-Dec-69	RADIATION MONITORING PROTECTION // FOLDER 1 AREA CONTAMINATION DAILY LOG BOOK 12/08/1969 THRU 02/12/1970
38266	8562772	32	12-Feb-70	RADIATION MONITORING PROTECTION // FOLDER 2 AREA DECONTAMINATION DAILY LOG BOOK 02/12/1970 THRU 05/03/1970
38292	8562773	32	6-May-70	RADIATION MONITORING PROTECTION // FOLDER 3 AREA DECONTAMINATION DAILY LOG BOOK 05/06/1970 THRU 10/05/1970
38299	8562774	32	5-Oct-70	RADIATION MONITORING PROTECTION // FOLDER 4 AREA DECONTAMINATION DAILY LOG BOOK 10/05/1970 THRU 12/31/1970
38856	8562775	32	4-Jan-71	RADIATION MONITORING PROTECTION // FOLDER 5 AREA DECONTAMINATION DAILY LOG BOOK 01/04/1971 THRU 08/11/1971
38856	8562776	32	12-Aug-71	RADIATION MONITORING PROTECTION // FOLDER 6 AREA DECONTAMINATION DAILY LOG BOOK 08/12/1971 THRU 10/14/1971
42324	8722942	32	6-Jul-87	RADIATION MONITORING PROTECTION // FOLDER 8 RCT LOG BOOK 07/06/1987 THRU 10/01/1997 B444

Receipt #	Bar Code	Record Type	Origin Date	Subject
74121				RADIATION MONITORING PROTECTION // HISTORICAL RECORDS TRANSMITTAL/PERSONNEL RADIATION HISTORY FILES / HEALTH PHYSICS LOG BOOKS 2/60, 5/63 VISITOR FILM BADGE 4/61-6/63 AIR AND SMEAR SAMPLES CY 1962 SITE SURVEY RESULTS CY 1959-60, 1962 PU/URINE RE BOX ORIGINALLY LOCATED AT FRC UNDER ACCESSION 430-80-0011 THIS BOX WAS CONTAMINATED COPIED BY AN RCT ON 5-2-2002 AND RE-ENTERED UNDER RTI 32 FOLDER 10 LOG BOOK 1962 SPECIAL 12-28-1961 THRU 12- 6-1962
74106				RADIATION MONITORING PROTECTION // HISTORICAL RECORDS TRANSMITTAL/PERSONNEL RADIATION HISTORY FILES / HEALTH PHYSICS LOG BOOKS 2/60, 5/63 VISITOR FILM BADGE 4/61-6/63 AIR AND SMEAR SAMPLES CY 1962 SITE SURVEY RESULTS CY 1959-60, 1962 PU/URINE RE BOX ORIGINALLY LOCATED AT FRC UNDER ACCESSION 430-80-0011 THIS BOX WAS CONTAMINATED COPIED BY AN RCT ON 5-2-2002 AND RE-ENTERED UNDER RTI 32 FOLDER 9 LOG BOOK 4-14-1961 THRU 12-1-1962
74121				RADIATION MONITORING PROTECTION // HISTORICAL RECORDS TRANSMITTAL/PERSONNEL RADIATION HISTORY FILES / HEALTH PHYSICS LOG BOOKS 2/60, 5/63 VISITOR FILM BADGE 4/61-6/63 AIR AND SMEAR SAMPLES CY 1962 SITE SURVEY RESULTS CY 1959-60, 1962 PU/URINE RE BOX ORIGINALLY LOCATED AT FRC UNDER ACCESSION 430-80-0011 THIS BOX WAS CONTAMINATED COPIED BY AN RCT ON 5-2-2002 AND RE-ENTERED UNDER RTI 32 FOLDERS 2 AND 3 LOG BOOK PRODUCTION AREA LOG HP 2-18-1960 THRU 6-24-1961
38226	8043045	32	27-Feb-89	RADIATION MONITORING PROTECTION /// 2/27/89 - 7/9/89 CONTAMINATION CONTROL REPORT BOOK // 7/10/89 - 11/18/89 CONTAMINATION CONTROL REPORT BOOK // 8/26/90 - 11/15/90 CONTAMINATION CONTROL REPORT BOOK // 1/16/91 - 4/28/91 CC LOG BOOK // 4/28/91 - 8/7/91 CC LOG BOOK // 7/2/91 - 10/7/91 CC LOG BOOK // 8/7/91 - 9/28/91 CC LOG BOOK // 9/28/91 - 1/8/92 CC LOG BOOK // 1/8/92 - 3/4/92 CC LOG BOOK // 6/14/92 - 9/22/92 CC LOG BOOK // 9/22/92 - 1/1/93 CC LOG BOOK // 4/11/93 - 1/23/93 CC LOG BOOK // 7/23/93 - 1/31/94 CC LOG BOOK // 4/22/94 - 11/3/94 CC LOG BOOK // 9/5/94 - 4/21/94 CC LOG BOOK (1989-1993)
38226	8035701	33	22-Oct-94	RADIATION MONITORING SURVEYS / CONTAMINATION CONTROL LOGBOOK / BLDG 707 10/22/1994 THRU 1/27/1995
68353			1994 - 1995	RADIATION MONITORING SURVEYS / CONTAMINATION CONTROL LOGBOOK / BLDG 707 10/22/1994 THRU 1/27/1995
38226	8035702	33	7-Dec-94	RADIATION MONITORING SURVEYS / FOREMAN'S LOGBOOK / BLDG 707 12/7/1994 THRU 3/6/1995
38263	8090552	33	6-Feb-95	RADIATION MONITORING SURVEYS / JACKET 36 / RCT'S DAILY LOG BOOK
62512			1975-1983	RADIATION MONITORING SURVEYS//C G HAYNES HP LOG BOOK NBS 6/1/1987 THRU 10/31/ 1983
62512			1975-1983	RADIATION MONITORING SURVEYS// C R JOHNSON UNIT LEADER AND ADMINISTRATOR LOG BOOK NBS 5/1/1975 THRU 11/30/1979

Receipt #	Bar Code	Record Type	Origin Date	Subject
62600			1977 - 1981	RADIATION MONITORING SURVEYS // CONTAMINATION CONTROL LOG BOOKS FOREMAN LOG BOOKS
38223	853134	33	1-Jan-77	RADIATION MONITORING SURVEYS // CONTAMINATION CONTROL LOG BOOKS FOREMAN LOG BOOKS (1977-1981)
38266	8526826	33	1-Jan-61	RADIATION MONITORING SURVEYS // INCIDENT REPORTS RF-21380 BLDGS 771 777 SITE SURVEY BLDGS 331 442 779 AND 559 RECORD BOOKS KITTINGER 1/7/1964 THRU 12/31/1968 1/1/1964 THRU 12/31/1968
62098			1994	SAFETY EVALUATIONS:UNREVIEWED SAFETY QUESTIONS DETERMINATIONS (USQD)/// EVALUATION #: PRE-RFP-94.0458-CGM / TITLE: CONTAMINATION CONTROL LOGBOOK, / DOCUMENT #: ROI 10.03 REV 06/21/90 / MODIFICATION #: DMR 93-000919 / COMPLETE DATE: 01/07/1994 / CLOSEOUT DATE: 01/20/1994 / DOE APPROVAL DATE: N/A / INCOMING LETTER #S: N/A / USQ N/Y: N/A / BLDG: RFP
SA2984				SAMPLING AND ANALYSIS PROCEDURES / PHYSICAL AND DIMENSIONAL STANDARDS TESTING// 091085 DENSITOMETER/FILM STRIP
40983	8568031	65	1-Mar-74	TERMINATED PERSONNEL RADIATION RECORDS // SPECIALS TLD BADGE MARCH THRU JUNE 1974
42374	8830094	209	26-May-69	This Record Contains Sensitive Information. Contact Records Management on X4006.
42428	8830095	209	16-Jun-69	This Record Contains Sensitive Information. Contact Records Management on X4006.
38200	54833	17	1-Sep-94	WELL 6874; TOM WADDLE HEALTH AND SAFETY LOG ENTRY OF JUNE 15 1994;TOM WADDLE HEALTH AND SAFETY LOG ENTRY OF JUNE 16 1994;LOGBOOK PAGES 116
68341			1989 - 2006	WIPP QUALITY ASSURANCE RECORDS// LETTER TO DISTRIBUTION FROM R V HALE SUBJECT DESTRUCTION OF OBSOLETE PROCEDURES 10/13/1988

**ATTACHMENT 5: DETAILED LOGBOOK ANALYSIS SUMMARY  
TABLES (ATTACHMENT 31 IN RFP SEC REPORT)**

*This Table May contain privacy Act information. Unauthorized possession or use prohibited.  
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Table 5-1: Detailed External Dosimetry Logbook Comparison (NDRP Data Used)

<b>ID</b>	<b>Date</b>	<b>Original Category</b>	<b>Cycle Date</b>	<b>Logbook Dose</b>	<b>NDRP Data Result</b>	<b>NDRP Vs. Logbook</b>	<b>Hard Copy Result</b>	<b>Hard Copy vs. Logbook</b>
2	4/11/1967	Total	1/1-12/31	2906	2910	C	2906	E
4	6/18/1968	Neutron		500	All 1968 neutron doses < 30 mrem	N	92	N
9	5/7/1968	Gamma	4/18-5/3	250	252	C	1782	C
9	5/7/1968	Neutron	4/18-5/3	1275	1275	E	1782	C
13	4/11/1967	Gamma	3/1-4/1	365	367	C	2385	C
13	4/11/1967	Neutron	3/1-4/1	854	854	E	2385	C
14	9/26/1967		7/1-9/1	>2 Rem	Confirmed exposure in excess of 2,000 mrem.	C	3396	C
15	3/19/1968		12/29/67-3/4/68	1102	1103	C	1341	C
22	8/28/1967	Neutron	7/28-8/18	329	329	E	2353	C
29	7/30/1968	Neutron	n/a	1380	Original neutron exposure through 7/24/68 is zero	N	1551	C
33	4/11/1967	Total	1/1-4/1	2971	2973	C	2971	E

C - consistent; N - inconsistent; E - Exact Match; In - Inconclusive

Table 5-2: Detailed External Dosimetry Logbook Comparison (Coworker Stat Date Used)

<b>ID</b>	<b>Date</b>	<b>Original Category</b>	<b>Cycle Date</b>	<b>Dose</b>	<b>Coworker Stat Data Result</b>	<b>Coworker Stat vs. Logbook</b>	<b>Hard Copy Result</b>	<b>Hard Copy vs. Logbook</b>
1	12/15/1967	Extremity	1/1-12/31	19265	n/a	C	22125	C
3	6/4/1968	Total	5/17-28/68	1079	0	N	1748	C
5	3/19/1968			1019	2589	C	1261	C
6	6/4/1968		5/17-28/68	828	n/a	In	1439	C
7	4/11/1967	Total		2949	7495	C	2999	C
10	6/4/1968		5/17-28/68	768	3659	C	1612	C
11	4/11/1967	Total		2039	7682	C	3160	C
16	4/11/1967	Total		2591	4687	C	2591	E
17	3/1/1969	Total		406	5421	C	808	C
17	4/11/1967	Total		868	3830	C	2971	C
18	6/4/1968	Neutron	5/17-28/68	670	n/a	In	1375	C
19	8/28/1967	Total		364	n/a	In	2783	C
23	6/4/1968	Gamma	5/17-28/68	670	4897	C	2335	C
24	12/23/1966		5/9-12/31	1100	3365	C	1659	C
26	6/4/1968		5/17-28/68	715	n/a	In	1542	C
27	9/20/1968	Total		383	5659	C	2506	C
30	4/11/1967	Total	1/1 - 6/5	1486	3977	C	2824	C
32	4/11/1967	Total		2853	5357	C	2853	E
34	4/11/1967	Total		2610	n/a	In	2610	E
35	4/11/1967	Total		2790	n/a	In	2790	E

C - consistent; N - inconsistent; E - Exact Match; In - Inconclusive

Table 5-3: Detailed Bioassay Logbook Comparison

<b>ID</b>	<b>Logbook Date</b>	<b>Category</b>	<b>Logbook<sup>1</sup></b>	<b>HIS_20</b>	<b>HIS_20 vs. Logbook</b>	<b>Hard Copy</b>	<b>Hard Copy vs. Logbook</b>
1	1/4/1971	Plutonium	0.17	0.17	E	0.17	E
2	1/4/1971	Plutonium	0.06	0.06	E	0.06	E
3	1/22/1970	Americium	Bkgd	0	C	Bkgd	E
3	11/3/1961	EP/U	13	13	E	13	E
3	8/17/1967	Plutonium	Bkgd	0	E	Bkgd	E
4	2/9/1965	Plutonium	Bkgd	0.14	C	0.14	C
4	4/11/1969	Plutonium	0.2	0.2	E	0.2	E
5	1/23/1967	Plutonium	0.32	0.31	C	0.32	E
5	1/23/1967	Americium	Bkgd	0.08	C	Bkgd	C
6	1/4/1960	Plutonium	Bkgd	0	C	Bkgd	E
6	1/5/1961	Electroplating	Bkgd	0	C	Bkgd	E
7	12/19/1967	Gross Alpha	Bkgd	0	C	Bkgd	E
8	1/13/1961	Fluorimetry	Bkgd	0	C	Bkgd	E
9	5/21/1959	Electroplating	136% MPL	120	C	120	C
9	5/27/1959	Electroplating	75% MPL	66	C	66	C
9	3/11/1960	Electroplating	192	192	E	192	E
10	11/9/1961	Electroplating	Bkgd	0	C	Bkgd	E
11	1/6/1961	Fluorimetry	Bkgd	0	C	Bkgd	E
12	1/16/1964	Plutonium	0.28	0.28	C	0.28	E
12	4/11/1969	Plutonium	0.99	0.99	E	0.99	E
12	1/28/1971	Plutonium	0.75	0.75	E	0.75	E
12	2/11/1965	Plutonium	Bkgd	n/a	In	Bkgd	E
12	4/3/1967	Plutonium	0.64	n/a	In	0.64	E
13	1/5/1961	GA	Lost	n/a	In	Lost	C
14	1/10/1963	Plutonium	0.42	n/a	In	0.42	E
15	1/5/1961	Electroplating	7	0	C	Bkgd	C
16	8/31/1960	Electroplating	29	29	E	29	E
17	1/10/1963	Plutonium	Bkgd	0	C	Bkgd	E
18	2/5/1960	Fluorimetry	Bkgd	n/a	In	Bkgd	E
19	2/20/1964	Plutonium	Bkgd	0	C	Bkgd	E
19	3/14/1969	Plutonium	Bkgd	0	C	Bkgd	E
20	8/31/1960	Electroplating	16	n/a	In	16	E
21	1/26/1961	Alpha	Bkgd	0	C	Bkgd	E
22	1/8/1960	Electroplating	72	72	E	72	E
22	11/9/1961	EP/U	24	n/a	In	24	E
23	3/10/1960	Uranium	108	108	E	108	E
23	1/5/1961	Electroplating	17	17	E	17	E
24	1/10/1963	Plutonium	Bkgd	0	C	Bkgd	E
24	1/6/1961	Electroplating	15	n/a	In	n/a	In
25	1/13/1960	Electroplating	8.8	8.8	E	8.8	E
26	1/6/1961	Electroplating	6	0	C	6	E
27	3/5/1970	Americium	Bkgd	n/a	In	Bkgd	E
28	1/20/1960	GA	Bkgd	0	C	Bkgd	E
29	1/10/1963	Plutonium	Bkgd	0.14	C	Bkgd	E

<b>ID</b>	<b>Logbook Date</b>	<b>Category</b>	<b>Logbook<sup>1</sup></b>	<b>HIS_20</b>	<b>HIS_20 vs. Logbook</b>	<b>Hard Copy</b>	<b>Hard Copy vs. Logbook</b>
30	6/18/1959		685% MPL	n/a	In	603	C
30	12/14/1959		262% MPL	n/a	In	230	C
30	12/24/1959		82% MPL	n/a	In	71	C
30	2/19/1960	Electroplating	102	n/a	In	102	E
30	3/14/1960	Electroplating	121	n/a	In	121	E
30	4/25/1960	Electroplating	15	n/a	In	15	E
31	2/10/1961	Alpha	Bkgd	0	C	Bkgd	E
32	1/5/1961	Electroplating	12	12	E	12	E
33	6/17/1957	Blood	0.8	n/a	In	n/a	In
34	1/10/1963	Plutonium	Bkgd	n/a	In	Bkgd	E
35	11/16/1962	Electroplating	Bkgd	0	C	Bkgd	E
35	11/15/1965	Americium	Bkgd	0	C	Bkgd	E
35	4/26/1965	Plutonium	Bkgd	0	C	n/a	In
36	8/26/1960	Electroplating	11	n/a	In	11	E
37	1/6/1961	Electroplating	9	9	E	9	E
38	1/12/1961	Fluorimetry	Bkgd	n/a	In	Bkgd	E
39	4/3/1967	Plutonium	0.44	n/a	In	0.44	E
40	1/4/1971	Plutonium	0.42	0.42	E	0.42	E
41	4/10/1964	Plutonium	Bkgd	n/a	In	Bkgd	E
42	2/8/1965	Americium	Bkgd	n/a	In	Bkgd	E
43	6/18/1969	Americium	Bkgd	n/a	In	Bkgd	E
44	1/6/1961	Electroplating	22	22	E	22	E
45	2/8/1961	Alpha	Bkgd	0	C	Bkgd	E
46	2/3/1960	GA	Bkgd	0	C	Bkgd	E
47	2/26/1960	Fluorimetry	Bkgd	0	C	Bkgd	E
48	1/8/1960	Gross Alpha	Bkgd	0	C	Bkgd	E
49	1/27/1961	Alpha	Bkgd	0	C	Bkgd	E
50	5/14/1959	Uranium	~70% MPL	60	C	60	C
51	1/6/1961	Electroplating	11	n/a	In	11	E
51	11/13/1961	EP/U	33	n/a	In	33	E
52	11/15/1965	Americium	Bkgd	n/a	In	Bkgd	E
52	9/27/1967	Gross Alpha	Bkgd	n/a	In	Bkgd	E
53	1/13/1960	Fluorimetry	Bkgd	0	C	Bkgd	E
54	1/13/1969	Plutonium	0.23	0.23	E	0.23	E
55	1/12/1960	Plutonium	Bkgd	n/a	In	Bkgd	E
56	2/6/1961	Alpha	Bkgd	0	C	Bkgd	E
57	2/15/1962	Plutonium	13	n/a	In	13	E
58	11/18/1959		206%MPL	182	C	182	C
58	1/10/1960	Electroplating	29	n/a	In	29	E
59	11/21/1962	Plutonium	Bkgd	n/a	In	Bkgd	E
60	1/22/1960	Fluorimetry	Bkgd	n/a	In	Bkgd	E
61	1/20/1967	Americium	Bkgd	0	C	Bkgd	E
61	1/16/1964	Plutonium	14.4	14.4	E	14.4	E
61	2/5/1965	Americium	1	1	E	1	E
61	1/20/1967	Plutonium	5.39	5.39	E	5.39	E
61	1/16/1969	Plutonium	8	8	E	8	E

<b>ID</b>	<b>Logbook Date</b>	<b>Category</b>	<b>Logbook<sup>1</sup></b>	<b>HIS_20</b>	<b>HIS_20 vs. Logbook</b>	<b>Hard Copy</b>	<b>Hard Copy vs. Logbook</b>
61	4/14/1969	Plutonium	8.7	8.7	E	8.7	E
62	11/16/1962	Plutonium	Bkgd	0	C	Bkgd	E
62	8/11/1969	Americium	Bkgd	0	C	Bkgd	E
62	1/14/1970	Plutonium	Bkgd	0	C	Bkgd	E
62	1/14/1970	Uranium	Bkgd	0	C	Bkgd	E
62	3/16/1964	Plutonium	Bkgd	n/a	In	Bkgd	E
63	1/7/1960	Plutonium	Bkgd	0	E	Bkgd	E
63	1/10/1963	Plutonium	0.39	n/a	In	0.39	E
64	1/27/1965	Plutonium	Bkgd	n/a	In	n/a	In
65	4/20/1960	Electroplating	124	n/a	In	124	E
66	1/6/1961	Alpha	0.08	0	C	Bkgd	C
67	12/6/1962	Electroplating	Bkgd	n/a	In	Bkgd	E
68	11/8/1961	EP/U	10	n/a	In	10	E
69	11/16/1961	EP/U	20	20	E	20	E
69	1/13/1960	Electroplating	Bkgd	n/a	In	Bkgd	E
70	1/19/1961	Alpha	Bkgd	n/a	In	n/a	In
71	2/24/1960	Fluorimetry	Bkgd	0	C	Bkgd	E
71	1/25/1961	Fluorimetry	Bkgd	0	C	Bkgd	E
72	1/11/1960	Electroplating	Bkgd	0	C	Bkgd	E
73	1/15/1960	Plutonium	Bkgd	n/a	In	Bkgd	E
74	1/22/1967	Americium	Bkgd	n/a	In	Bkgd	E
74	11/22/1965	Americium	Bkgd	0.11	C	Bkgd	E
75	1/16/1969	Plutonium	0.29	0.29	E	0.29	E
75	5/10/1971	Plutonium	0.12	n/a	In	0.12	E
76	1/22/1960	Fluorimetry	Bkgd	n/a	In	Bkgd	E
77	11/16/1962	Electroplating	Bkgd	0	C	Bkgd	E
77	3/27/1967	Electroplating	Bkgd	0	C	Bkgd	E
77	2/14/1969	Plutonium	Bkgd	0.07	C	Bkgd	E
77	10/10/1969	Electroplating	Bkgd	n/a	In	n/a	In
78	1/3/1966	Plutonium	Bkgd	0.13	C	0.13	C
78	1/3/1966	Americium	Bkgd	0	C	Bkgd	E
78	3/5/1970	Americium	Bkgd	0	C	Bkgd	E
78	11/25/1962	Plutonium	0.51	n/a	In	0.51	E
78	1/10/1963	Plutonium	0.49	n/a	In	0.49	E
78	1/15/1964	Plutonium	0.29	0.37	N	0.37	N
79	3/29/1971	Plutonium	0.29	n/a	In	0.29	E
80	5/10/1971	Plutonium	Bkgd	n/a	In	Bkgd	E
81	2/19/1961		Bkgd	n/a	In	Bkgd	E
82	10/3/1958	Uranium	203% MPL	n/a	In	179	C
82	11/21/1962	Electroplating	Bkgd	n/a	In	Bkgd	E
83	11/21/1962	Plutonium	Bkgd	n/a	In	Bkgd	E
84	1/7/1960	Electroplating	14	14	E	14	E
84	1/11/1961	Electroplating	14	14	E	14	E
84	2/15/1962	Plutonium	Bkgd	n/a	In	Bkgd	E
85	2/10/1961	Fluorimetry	Bkgd	0	C	Bkgd	E
86	8/29/1960	Electroplating	11	n/a	In	11	E

<b>ID</b>	<b>Logbook Date</b>	<b>Category</b>	<b>Logbook<sup>1</sup></b>	<b>HIS_20</b>	<b>HIS_20 vs. Logbook</b>	<b>Hard Copy</b>	<b>Hard Copy vs. Logbook</b>
87	1/8/1960	Gross Alpha	Bkgd	0	C	Bkgd	E
88	1/13/1960	Plutonium	Bkgd	n/a	In	Bkgd	E
89	11/21/1962	Plutonium	Bkgd	n/a	In	Bkgd	E
90	1/19/1961	Alpha	Bkgd	0	C	Bkgd	E
91	1/8/1960	Fluorimetry	Bkgd	n/a	In	Bkgd	E
91	1/12/1961	Fluorimetry	Bkgd	n/a	In	Bkgd	E
92	11/21/1962	Plutonium	Bkgd	n/a	In	Bkgd	E
93	1/26/1965	Plutonium	0.35	0.35	E	0.35	E
94	5/21/1965	Americium	Bkgd	n/a	In	n/a	In
95	1/17/1964	Plutonium	Bkgd	0	C	Bkgd	E
95	1/5/1967	Americium	0.44	0.44	E	0.44	E
95	1/28/1971	Plutonium	0.03	0.03	E	0.03	E
96	1/26/1961	Fluorimetry	Bkgd	0	C	Bkgd	E
97	11/21/1962	Plutonium	Bkgd	0	C	Bkgd	E
98	1/18/1960		99% MPL	n/a	In	87	C
99	2/10/1961	Fluorimetry	Bkgd	0	C	Bkgd	E
100	1/6/1960	Gross Alpha	Bkgd	0	C	Bkgd	E
101	1/6/1960	Electroplating	Bkgd	0	C	Bkgd	E
102	11/21/1962	Electroplating	Bkgd	0	C	Bkgd	E
102	8/17/1967	Plutonium	Bkgd	0	C	Bkgd	E
102	3/11/1970	Plutonium	Bkgd	0	C	Bkgd	E
102	1/14/1970	Plutonium	0.38	0.38	E	0.38	E
102	1/2/1964	Plutonium	Lost	n/a	In	Lost	E
102	1/3/1966	Plutonium	Bkgd	0.07	C	Bkgd	E
103	1/6/1960	Gross Alpha	Bkgd	0	C	Bkgd	E
104	1/14/1960	GA	Bkgd	0	C	Bkgd	E
105	3/21/1960	Electroplating	115	115	E	115	E
106	11/21/1962	Plutonium	Bkgd	n/a	In	Bkgd	E
107	1/20/1967	Americium	Bkgd	0	C	Bkgd	E
107	1/10/1963	Plutonium	0.98	0.98	E	0.98	E
107	7/21/1964	Plutonium	7.67	7.67	E	7.67	E
107	6/2/1967	Plutonium	1.43	1.43	E	n/a	In
107	1/29/1971	Plutonium	0.45	n/a	In	0.45	E
107	1/29/1971	Electroplating	Bkgd	n/a	In	Bkgd	E
108	1/7/1960	Plutonium	Bkgd	n/a	In	Bkgd	E
109	1/6/1960	Plutonium	Bkgd	n/a	In	Bkgd	E
110	2/3/1960	GA	Bkgd	0	C	Bkgd	E
111	12/23/1969	Americium	Bkgd	0	C	Bkgd	E
111	3/11/1970	Plutonium	0.2	0.2	E	0.2	E
111	4/3/1967	Plutonium	0.29	n/a	In	0.29	E
112	11/25/1969	Americium	Bkgd	0	C	Bkgd	E
112	2/3/1970	Americium	Bkgd	0	C	Bkgd	E
113	1/5/1961	Fluorimetry	Bkgd	n/a	In	Bdgd	E
113	5/21/1965	Americium	Bkgd	n/a	In	Bkgd	E
114	2/25/1967	Electroplating	Bkgd	n/a	In	Bkgd	E
115	2/17/1970	Plutonium	Bkgd	0	C	Bkgd	E

<b>ID</b>	<b>Logbook Date</b>	<b>Category</b>	<b>Logbook<sup>1</sup></b>	<b>HIS_20</b>	<b>HIS_20 vs. Logbook</b>	<b>Hard Copy</b>	<b>Hard Copy vs. Logbook</b>
115	3/13/1970	Plutonium	0.21	0.21	E	0.21	E
116	2/11/1960	Fluorimetry	Bkgd	n/a	In	Bkgd	E
117	5/11/1971	Plutonium	Bkgd	n/a	In	Bkgd	E
118	11/21/1962	Plutonium	Bkgd	0	C	Bkgd	E
119	12/27/1962	Electroplating	Bkgd	0	C	Bkgd	E
120	2/17/1965	Gross Alpha	Bkgd	0	C	Bkgd	E
121	1/16/1969	Plutonium	Bkgd	n/a	In	Bkgd	E
122	1/8/1960	Plutonium	Bkgd	0	C	Bkgd	E
123	1/15/1960	GA	Bkgd	n/a	In	Bkgd	E
124	4/20/1960	Electroplating	116	n/a	In	116	E
124	5/4/1960	Electroplating	11	n/a	In	11	E
124	9/2/1960	Electroplating	16	n/a	In	16	E
125	1/15/1960	Plutonium	Bkgd	n/a	In	Bkgd	E
126	11/17/1961	EP/U	Bkgd	n/a	In	Bkgd	E
127	8/29/1960	Electroplating	Bkgd	0	C	Bkgd	E
128	8/30/1971	Americium	4	4	C	4	E
128	8/24/1971	Plutonium	127	127.3	E	127	E
128	8/30/1971	Plutonium	86	n/a	In	86	E
129	1/10/1963	Plutonium	Bkgd	n/a	In	Bkgd	E
130	8/7/1959		212	n/a	In	212	E
130	8/26/1960	Electroplating	9	n/a	In	9	E
131	8/30/1960	Electroplating	32	32	E	32	E
131	10/6/1959		1300	n/a	In	1300	E
132	2/12/1960	Fluorimetry	Bkgd	0	C	Bkgd	E
133	6/1/1967	Electroplating	Bkgd	0	C	Bkgd	E
133	11/21/1967	Electroplating	Bkgd	0	C	Bkgd	E
134	2/3/1970	Americium	Bkgd	0	C	Bkgd	C
134	12/24/1962	Electroplating	Bkgd	0	C	Bkgd	E
134	1/20/1967	Americium	0.33	0.33	E	0.33	E
134	1/20/1967	Plutonium	Bkgd	n/a	In	Bkgd	E
135	1/21/1960	Plutonium	Bkgd	n/a	In	Bkgd	E
136	2/21/1964	Plutonium	0.37	0.47	N	0.47	N
137	8/26/1960	Electroplating	26	26	E	26	E
137	11/9/1961	Electroplating	21	21	E	21	E
138	2/3/1961	Fluorimetry	Bkgd	n/a	In	Bkgd	E
139	2/15/1962	Plutonium	29	n/a	In	29	C
139	1/13/1960	Electroplating	14	n/a	In	14	E
140	2/20/1964	Plutonium	Bkgd	n/a	In	0.23	N
141	1/20/1967	Plutonium	Bkgd	0	C	Bkgd	E
141	3/11/1970	Plutonium	0.29	0.29	E	0.29	E
141	11/21/1962	Plutonium	0.31	n/a	In	0.31	E
142	4/28/1959	Uranium	~50% MPL	36	C	36	C
143	1/18/1960		72% MPL	n/a	In	n/a	In
144	2/15/1965	Gross Alpha	Bkgd	0	C	Bkgd	E
144	12/20/1967	Gross Alpha	Bkgd	0	C	Bkgd	E
144	10/18/1965	Americium	0.24	0.24	E	0.24	E

<b>ID</b>	<b>Logbook Date</b>	<b>Category</b>	<b>Logbook<sup>1</sup></b>	<b>HIS_20</b>	<b>HIS_20 vs. Logbook</b>	<b>Hard Copy</b>	<b>Hard Copy vs. Logbook</b>
145	2/15/1962	Plutonium	44	n/a	In	44	E
146	11/9/1961	EP/U	14	n/a	In	14	E
147	12/14/1967	Gross Alpha	Bkgd	0	C	Bkgd	E
148	3/29/1971	Plutonium	0.09	n/a	In	0.09	E
148	5/10/1971	Plutonium	0.006	n/a	In	0.06	N

<sup>1</sup> Results were compiled from the urinalysis logbooks.

C - consistent; N - inconsistent; E - Exact Match; In – Inconclusive; n/a – not available

Table 5-4: Detailed *In Vivo* Count Comparison between Logbook Data and Health Physics Files

<b>ID</b>	<b>Logbook Date</b>	<b>In Vivo Count in Hard Copy Record<sup>1</sup></b>	<b>Comment</b>
149	11/1/1967	Yes	Positive
150	11/6/1968	Yes	Bkgd
151	11/6/1968	Inconclusive	HP file unavailable
152	6/4/1965	Yes	Positive
152	10/14/1968	Yes	Bkgd
153	10/8/1968	Yes	Bkgd
154	10/14/1968	Yes	Bkgd
155	10/14/1968	Yes	1.4 MPLB
156	10/14/1968	Yes	Bkgd
157	10/8/1968	Yes	36% MPLB
158	6/17/1968	Yes	Bkgd/Pos
158	10/14/1968	Yes	Bkgd
159	11/6/1968	Yes	Bkgd
160	3/18/1969	Yes	Bkgd
160	10/14/1968	No	Incident w/ Request for In Vivo Count but no count available
161	10/8/1968	Yes	Left Lung Pos
162	10/14/1968	Yes	Bkgd
163	9/25/1969	Yes	Bkgd; Skin Contamination Incident
164	10/14/1968	Yes	Bkgd
165	5/22/1969	Yes	Bkgd
166	10/24/1966	Yes	Am Positive
167	10/8/1968	Inconclusive	HP file unavailable
168	12/10/1969	Yes	Bkgd; Count date 12/11/69
169	11/6/1968	Yes	Bkgd; Count date 11/7/68
170	11/6/1968	Yes	Bkgd; Count date 11/7/68
171	11/6/1968	Yes	<2-sigma
172	10/14/1968	Yes	Bkgd
173	9/15/1969	Yes	Bkgd
174	11/6/1968	Yes	~23% MPLB
175	10/8/1968	Yes	>20; Multiple followup counts, 10/9/68, 1.92 MPLB
176	10/14/1968	Yes	Bkgd
177	10/8/1968	Yes	>2 sigma
178	11/6/1968	Yes	Bkgd; Count date 11/7/68
179	10/14/1968	Yes	Bkgd
179	10/2/1969	Yes	Bkgd
180		Inconclusive	HP file unavailable
181	11/6/1968	Yes	Bkgd; Count date 11/11/68
182	11/18/1968	Inconclusive	HP file unavailable

<sup>1</sup> Inconclusive indicates the hard copy dosimetry file was not available for review.

Table 5-5: Qualitative Comparisons between Logbook Data and Health Physics Files

ID	Description of Logbook Entry	Date of Logbook Entry	Result	Incident or Wound Count Report	Skin Contamination Report	Dosimetry Investigation Report	Comment
143	Urine Submitted	3/12/1964	Bkgd	n/a	n/a	n/a	Sample date 3/1/64
141	Urine Request	9/23/1969	0.17	n/a	n/a	n/a	Sample date 9/25/69
183	Wound Count	7/1/1969		Yes	n/a	n/a	
184	Wound Count	1/13/1967		Yes	n/a	n/a	
185	Wound Count	4/24/1969		Yes	n/a	n/a	
186	Wound Count	2/16/1967	0.006 ug	Yes	n/a	n/a	
187	Wound Count	3/9/1967	3.25 ug	Yes	n/a	n/a	
188	Wound Count	12/15/1966		Yes	n/a	n/a	
189	Skin Contamination	5/8/1967		n/a	Yes	n/a	
190	Skin Contamination	5/8/1967		n/a	Yes	n/a	
190	Skin Contamination	5/12/1967		n/a	Yes	n/a	
191	Contamination	5/25/1967		n/a	Yes	n/a	
192	Skin Contamination	5/8/1967		n/a	Yes	n/a	
193	Skin Contamination	5/8/1967		n/a	Yes	n/a	
194	Skin Contamination	5/8/1967		n/a	Yes	n/a	
195	Contaminated Badge	1/20/58		n/a	n/a	No	
196	Contaminated Badge			n/a	n/a	No	
20	Dose Adjustment	3/7/1967	3400	n/a	n/a	No	
20	Dose Adjustment	3/10/1967	3400	n/a	n/a	No	
31	Dose Adjustment	9/14/1967	1341	n/a	n/a	No	
197	Incident	6/25/1967		No	n/a	n/a	
198	Incident	1/18/1974		No	n/a	n/a	
199	Incident	4/20/1964		No	n/a	n/a	
200	Incident	11/7/1968		Yes	n/a	n/a	
201	Incident	11/6/1968		Yes	n/a	n/a	
202	Incident	11/6/1968		Yes	n/a	n/a	
203	Incident	11/6/1968		Yes	n/a	n/a	
204	Incident	11/6/1968		Yes	n/a	n/a	
205	Incident	11/6/1968		Yes	n/a	n/a	
206	Incident	11/6/1968		Yes	n/a	n/a	
207	Incident	11/6/1968		Yes	n/a	n/a	
208	Incident	4/16/1969		Yes	n/a	n/a	

n/a = not applicable

Table 5-6: Overexposure Comparisons between Logbook Data and Health Physics Files

<b>ID</b>	<b>Description of Logbook Entry</b>	<b>Date of Logbook Entry</b>	<b>Exposure Period</b>	<b>Result (mrem)</b>	<b>Logbook vs. Hard Copy Record</b>	<b>Comment</b>
25	Overexposed Film	12/7/1967	Q4/T	566	In	Inconclusive. No additional information is located in the HP file.
8	Overexposure	7/24/1967	Q3/T	2122	C	Overexposure 6/16-7/3 Confirmed
28	Overexposure	9/26/1967	Q3/T	3783	C	Exposure in excess of 3.0 Rem/qtr
20	Overexposure	3/17/1967	Q1/T	3400	C	Exposure in excess of 3.0 Rem/qtr
21	Overexposure	3/17/1967	Q1/T	3166	C	Exposure in excess of 3.0 Rem/qtr
12	Overexposure	4/24/1967	Q1	3239	C	Exposure in excess of 3.0 Rem/qtr

C - consistent; N - inconsistent; E - Exact Match; In - Inconclusive; n/a - not available; T = total; Q1 = First Quarter; Q2 = Second Quarter; Q3 = Third Quarter; Q4 = Fourth Quarter