Date: July 31, 2006

SEC00057
Office of Compensation Analysis and Support
NIOSH MS-C-47
4676 Columbia Parkway
Cincinnati, OH 45226

We are responding to your letter of May 10, 2006.

1 Item number 6 deficiency Section F item F1

This petition is to include all classes, all areas of the Hanford Nuclear Reservation for the years 1942 through 1990.

We intend to show either through documentation or statements provided by affidavit that radiation overexposures and radiation doses potentially incurred by members of all classes at the Hanford Nuclear Reservation were not monitored or consistently monitored through personal monitoring or area monitoring.

1.1 Missing Years and PNNL Records

nformation shows PNNL letter dated March 20, 2003 admits no monitoring during 1955 though he worked during that time period. Ten years of the twenty years that were worked at the Hanford Nuclear Reservation do not have monitoring records. The ten years without dose monitoring records of any type are 1942, 1943, 1946, 1949, 1950, 1951, 1952, 1953, 1954, 1955, and 1956. In 1945 and 1947 REX shows exposures but there are no supporting documents. In 1944 monitoring occurred only in November and December. For the years that are monitored the REX program summarized by year when in fact monitoring records only indicate specific months. (An example is in 1960 there were two samples taken, one in February and one in September, the summary is for the entire year.) Also in the PNNL letter, "According to our records, no internal doses were recorded for this individual while employed or visiting Hanford." This is *not accurate*!
(All documentation for part of the original SEC 000057 Petition)

1.2 Affidavit

ffidavit and supporting documents testify to missing internal dosemetry measurements for 1952 and 1954. Medical document dated Nov. 7. 1962 states was ill "from time of criticality". (See affidavit of (Sec. 3.1) PNNL exposures listed in letter of July 16, 2001 are all less than 5000 REM. (Sec. 4.1) There are no internal dose records per PNNL, "According

to our records, no internal doses were recorded for this individual while employed or visiting Hanford."

1.3 I

) information shows evidence of an overexposure incident in affidavits by five of her immediate family members. The incident was reported in the DuPont newsletter distributed at the Hanford Nuclear Reservation with a picture of her and her supervisor. The three children born after the overexposure incident have health problems including cholesteatoma tumors resulting in disability. Her first child born prior to the overexposure incident has none of these health problems. (See affidavits for Sec. 3.3) Her PNNL letter shows zero doses. PNNL letter dated Feb. 20, 2001, "According to our records, no internal doses were recorded for this individual while employed or visiting Hanford." (Authorization to use cords Sec. 4.3, 4.4, 4.5, 4.6, 4.7)

1.4 Diary

Diary released by daughter and son shows the following:

Diary page 5: "Worked in a 234-5 Vault, instrument could not take the high neutron reading, was removed. Later we could not get any instrument maintenance men near this area. I worked in this vault several days a week. It was storage for high radioactive waste."

Diary page 4: "234-5 radiation limits set up for hand exposure only although body was subject to this radiation limit – no shielding during years of operations of this building".

In a letter (Sec. 3.3) signed by , Staff Scientist, Health Protection Department, dated August 27, 1997, Pacific Northwest National Laboratories placed in record states,

> "This report concludes that there is under-recorded neutron dose for plutonium workers during the period of 1950-1971 when the Hanford Nuclear Track Emulsion, Type A, (NTA) film was used."
>
> "It is widely recognized that unrecorded neutron dose occurred and identification of these workers (to exclude them from dose – effect analysis) was included in the IARC epidemiologic evaluations (Cardis 1995)."

2 Item number 7 section F item F2

We have attached documents and statements provided by affidavit that indicate that radiation monitoring records for members of this class have been lost, falsified or destroyed; or that there is no information regarding monitoring source, source term or process from the site of the Hanford Nuclear Reservation.

2.1 General Information

Hanford Radiation Records Program, informed us in a telephone conversation that the dose monitoring records were put on microfiche film. "The records that were on microfiche are very poor quality especially 1955, 1956 and 1957". These were entered into REX. Out of the FOIA request there are 47 pages of records that are stamped "Best Available Copy" and many more are unreadable. There are also pages of dose monitoring hand written records that have no information entered in the calendar form. The FOIA request had 117 pages stamped "Best Available Copy", 32 additional pages were unreadable.

2.2 Monitoring Under Recorded Neutron Doses

In a letter (Sec. 3.3) signed by , Health Protection Department, dated August 27, 1997, Pacific Northwest National Laboratories placed in record states,

> "This report concludes that there is under-recorded neutron dose for plutonium workers during the period of 1950-1971 when the Hanford Nuclear Track Emulsion, Type A, (NTA) film was used."
>
> "It is widely recognized that unrecorded neutron dose occurred and identification of these workers (to exclude them from dose – effect analysis) was included in the IARC epidemiologic evaluations (Cardis 1995)."

2.3 Worker's Overexposure Incidents

FOIA requests for the Hanford employees listed below are missing documentation of over exposure incidents. According to affidavits, numerous over exposure incidents occurred. The records are lost, destroyed or falsified.

2.3.1 Affidavit (Sec. 4.1)

"Ill from time of criticality incident". (see medical record dated 11/7/62) PNNL letter (Sec. 3.2) dated July 16,2006 states, "According to our records, no internal doses were recorded for this individual while employed or visiting Hanford."

2.3.2 [illegible] Affidavit (Sec. 4.3 through 4.8)

[illegible] experienced an overexposure incident while working in a lab. The three children born after the overexposure incident suffered health problems including cholesteatoma tumors resulting in disability. Her first child born prior to the overexposure incident has none of these health problems. (See affidavits of [illegible].) Her PNNL letter (Sec. 3.4) dated Feb. 20, 2001, shows zero doses. There are no internal dose records per PNNL, "According to our records, no internal doses were recorded for this individual while employed or visiting Hanford."

2.3.3 Affidavit (See Original Petition)

The affidavits testify that as sent home from work due to overexposure on several separate occasions. These incidents should be in the missing Worker's Compensation file cabinets. PNNL letter dated Mar. 20, 2003, ENCL 9 in SEC Petition dated Mar. 8, 2006, "According to our records, no internal doses were recorded for this individual while employed or visiting Hanford."

2.3.4 .. Diary (Sec. 4.8)

[illegible] diary reports him being lowered by his ankles into a waste recovery tank to clean the bottom. He experienced a, "sensation I'll never forget". (See diary page 2 of 5.) PNNL letter (Sec. 3.5) dated May 7, 2002 "According to our records, no internal doses were recorded for this individual while employed or visiting Hanford."

s affidavit (Sec. 4.9) states he "backs the [illegible]. [illegible] were both operators at 234-5. [illegible] states they were sample tested for bio assay "Sometimes a new pee can was set on the proch every day, sometimes every month depending (on) the monitored level of contamination at the current job."

2.3.5 .. Affidavits (Sec. 4.10 and 4.11)

According to (Sec. 4.10) and affidavits these overexposure incidents should be in the Worker's Compensation files. There were four file cabinets of Worker's Compensation claims kept in .. Worker's Compensation Administrator's office. These old files contained radiation overexposure claims from the time of the Hanford project startup through the beginning of the Westinghouse contract and were directed by DOE to be kept for 80 to 100 years. (See l affidavits)

2.3.6 Missing Internal Dosemetry Records

should all have extensive internal dosemetry records. They have not been provided through FOIA requests. We believe these records have been lost, destroyed or falsified.

2.3.7 Lost Records

2.3.7.1 record of investigation of personnel radiation monitor results dated May 23, 1962 documents the neutron film dosimeter and finger ring dosimeter, "Lost reading because dosimeters were left in 234-5 bldg. during criticality incident" (See 3.7)

2.3.7.2 record dated July 11, 2006 (See 3.8)

"Whole body dose for 1954 could not be verified due to the poor quality of prints." The FOIA request had 117 copies stamped "best available copy" and there were an additional 32 copies that were not readable.

2.3.7.3 ecords dated August 26, 1963 (See 3.9)

records dated August 26, 1963 Plutonium Urinary Excretion Data lists seven exposure incidents, the PNNL letter (See 3.9) dated July 11, 2006 lists three intake incidents, a memorandum was found for one additional intake incident dated Feb. 18, 1961. (See 3.10) This illustrates PNNL data from REX is inaccurate. See REX-01 D00 page 4, "This report summarizes all bioassay data available in the REX electronic database. It is possible that additional bioassay data exist in microfilm records that have not been incorporated into REX, *although it normally can be assumed* that omitted records are inconsequential to dose calculations. (See 3.6) The above records show positively that REX records are not complete and no assumptions should be made.

2.3.7.4 e Record For Intake Incident Dated May 23, 1963

The record for an intake incident that occurred May 23, 1963, titled Record for Employee Exposure Record Folder states "Evaluations, documents and information regarding plutonium deposition cases are maintained in a record file designated as Plutonium Deposition Cases. ed in the same building, there are no such records for Haugen.

2.4 Coercion

There were known incidents of coercion to change recorded exposure measurements

2.4.1 Coercion

The hand written diary by tells of coercion by supervisors to falsify monitoring records or be sent home without pay, or the operators falsified monitoring records in order to work overtime. (Diary page 7 of 28) "In earlier 234-5 Bldg. years, operators kept their own radiation records. The RAD collected at end of each week – where there was overtime days the Operators would change their records before turning them into RMU in order to get an overtime day." "Also at this time when Operators had exceeded their RAD limits and could not do their next days work they were advised they may be sent home, without pay. This was Bldg. supervisor ultimatum (L ".

2.4.2 Herbert Dale Affidavit

The affidavit supports the diary records of th were operators in the 234-5 building and worked together or knew of each other's job stations.

2.4.3 avit

The affidavit also asserts dosemetry records were manipulated for the purpose of censoring data.

2.5 Missing records

There are several types of missing records; worker's compensation files, dose monitoring records, internal dose monitoring records, records are that "Best Available Copy" or records that are unreadable. There are records that were falsified and we assert that data was manipulated (See equests under the Freedom of Information Act do not provide all of the available information in one request. In the FOIA information was requested two different times, with different information provided each time. Requested FOIA documents are not given out in the time specified, cooperation of the FOIA officer at Hanford can only be obtained through her supervisor, see affidavits on this subject. (See 4.12)

2.5.1 and Affidavits (See 4.10 and 4.11)

Attached are affidavits from worked as a clerk in the Westinghouse office of Worker's Compensation; s the Administrator of Westinghouse Worker's Compensation. Their affidavits testify that there were four file

cabinets in [redacted]'s office that contained Worker's Compensation records of incidents and radiation claims that occurred from the beginning of the Hanford Nuclear Project. [redacted] DOE overseer of Workers Compensation wrote a directive for Westinghouse to retain all these claims for 80 to 100 years. A copy of this directive was put in each folder in the cabinets.

2.5.2 FOIA requests do not contain Worker's Compensation Claims Information

FOIA requests filed for records to support EEOICP claims for [redacted] do not have any records of radiation incidents claims testified to in these affidavits. FOIA requests indicate [redacted], the Freedom of Information Act Officer, furnished dosemetry information from Pacific Northwest National Laboratories (PNNL) only.

If there were no worker's claims filed for the listed members of the class this strongly indicates a cover-up of overexposure incidents that occurred. If they were filled, they have been lost, destroyed or falsified.

2.5.3 Bio Assay Records Missing

U.S. Testing was one of the company's that did the fecal and urinalysis testing from the sample cans that were left at front doors all over Richland. (see [redacted]idavit) [redacted]'s mother, [redacted] worked for them (see [redacted]idavit) (See 4.13) as did friend of [redacted] and [redacted] Brown. Bio Assay records are missing for the specimens that were collected. Per [redacted]affidavit, (See 4.9) the fecal and urine specimens were collected, for bio assay "Sometimes a new pee can was set on the porch every day, sometimes every month depending (on) the monitored level of contamination at the current job."

[redacted] affidavit (See 4.13) sample cans were placed on their front porch regularly. REX records for [redacted] are incomplete. Records that are available show Urinalysis (UA) only which is not accurate. (see Carrico affidavit)

2.5.4 Missing Bio Assay Reports (See 3.4)

[redacted] records show a PNNL letter for zero dose recorded even though the story of the incident was printed in the DuPont Newsletter. She was scrubbed clothed and unclothed and her co-workers were picked up from their homes that evening and taken back to work to be scrubbed. (see [redacted]davits) (See 4.2 through 4.7)

2.5.5 [redacted] Affidavit (See 4.1)

The [redacted] information testifies that his group manager died after receiving acute radiation exposure burns in 1952. There is no incident report for [redacted]. His External dosemetry records are missing for 1952 and 1954. (See 3.12) His medical history document dated Nov. 7, 1962, signed by [redacted] states illness since "critical incident". Per a medical record dated Feb. 24, 1956, he acknowledged he received significant radiation exposure. There are no records of a criticality exposure for [redacted] in any of the FOIA requested documents received. The PNNL letter extremity dose equivalent equals 30,070, the letter also states "According to our records, no internal doses were recorded for this individual while employed or visiting Hanford." Document Sec. 3.2 shows bio assay results with the exception of 1952. Incident records on this man are missing, lost or destroyed.

2.5.6 [redacted] Dairy Missing Records

Vern Haugen documents REX 000408 (See 3.14) Individual Dosimeter History shows neutron exposure for 1950 and 1951 and shows other exposures. Neutron monitoring records are missing from REX requested through FOIA. [redacted] writes about working in the 234-5 Vault (diary page 5) where the neutron readings were so high the current instruments could not be used and were removed. None of the RMU maintenance men would enter it. The Nuclear Engineers and supervisor knew of this and allowed workers (Operators) to continue working. (See PNNL Letter Jack Fix, Sec. 3.3)

2.5.7 Declaration of Lost, Destroyed or Falsified Records.

From the affidavits furnished with this petition, we are declaring that: The missing years were either not documented by the DOE contractor at the time or if there were any records they were lost, destroyed or falsified. All the PNNL letters state the "internal doses were not recorded" and the affidavits stating "sample cans were left" indicate the records were lost, destroyed or falsified.

2.5.8 The [redacted] documents show the following:

2.5.8.1 REX Internal Dosimetry Report, dated May 26, 2006, (See 3.15) shows a parameter search from 1900 to 2099. The results are confusing and at best show REX is inaccurate. It has bio assay results for 1948 through 1958 minus 1952, again there is no volume on the samples and shows no results. The FOIA request documents contained records for bio assay results for five samples for year 1948 through 1951. There are no other documents to

support bioassay results for 1953 through 1958. There are Invivo results for March 1, 1962 only.

2.5.8.2 Battelle memorial Institute exposure summary letter for 1966 or 1968 (copy difficult to read), (See 3.18) and Aug. 9, 1971, (See 3.19) Aug 9, 1977, (See 3.20) Aug. 8, 1978 (See 3.21) are present in the Petty records. FOIA request does not include the summary letters for all the other years [redacted] worked at Hanford. There are no supporting documents for the results in these letters. There are no badge reports, etc. There are no copies of exposure summery letters in the documents for [redacted]

2.5.8.3 The PNNL letter dated May 8, 2002 (See 3.22) states "According to our records, no internal doses were recorded for this individual while employed or visiting Hanford.", however the affidavit for [redacted] states sample cans were collected for him regularly. [redacted] records contain 46 "Best Available Copy" and seven "unreadable" data sheets.

[redacted] July 31, 2006
Date

[redacted] July 31, 2006
Date

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Section

support bioassay results for 1953 through 1958. There are invivo results for March 1, 1962 only.

2.5.8.2 Battelle memorial Institute exposure summary letter for 1966 or 1968 (copy difficult to read), (See 3.18) and Aug. 9, 1971, (See 3.19) Aug 9, 1977, (See 3.20) Aug. 8, 1978 (See 3.21) are present in the records. FOIA request does not include the summary letters for all the other years worked at Hanford. There are no supporting documents for the results in these letters. There are no badge reports, etc. There are no copies of exposure summery letters in the documents for or

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July 31, 2006
Date

Date

MEDICAL HISTORY [ ] TERMINATION [ ] PERIODIC [X] INTERIM

[illegible] 813	EMPL. CODE	AREA 1006[illegible]	[illegible] 105	JOB TITLE [illegible]
	MARITAL			
DATE 11-7-62	NAME AND ADDRESS, SPOUSE OR NEXT OF KIN (FOR EMERGENCY)			HEIGHT 6
				AGE

HAS ANY OF THE FOLLOWING CONDITIONS OCCURRED SINCE LAST COMPANY EXAMINATION	NO	YES	EXPLANATIONS
1. WEIGHT GAINED OR LOST			[illegible]
2. VISION LOSS			
3. FREQUENT HEADACHES	✓		
4. DIZZINESS OR FAINTING SPELLS	✓		
5. HEARING LOSS	✓		
6. PERSISTENT HOARSENESS			
7. PERSISTENT COUGH	✓		
8. SHORTNESS OF BREATH	✓		
9. CHEST PAIN	✓		
10. FREQUENT POOR APPETITE	✓		[illegible]
11. PERSISTENT STOMACH DISTRESS	✓		[illegible]
12. PERSISTENT DIARRHEA OR CONSTIPATION	✓		[illegible]
13. URINATION FREQUENT OR PAINFUL	✓		[illegible]
[illegible]			

X-ERCS

Radiological Exposure System
Hanford Occupational Lifetime Totals by Year

Name: [redacted] SSN: [redacted]

PAY ID	HID	YEAR	WHOLE BODY EXTERNAL	WHOLE BODY INTERNAL*	SKIN	EXTREMITY	EYE	PC
		1972	320		320	320		E
		1971	1880		1950	1950		E
		1970	1720		1750	1750		E
		1969	2694		2760	2760		E
		1968	1280		1280	1280		E
		1967	1490		1490	1490		E
		1966	2651		2670	2670		E
		1965	2890		2890	2890		E
		1964	1030		1060	1810		E
		1963	1030		1030	3740		E
		1962	1240		1310	1310		E
		1961	460		470	470		E
		1960	460		530	530		E
		1959	340		340	340		E
		1958	1290		1330	1330		E
		1957	760		830	830		E
		1956	280		720	720		E
		1955	300		800	3300		E
		1954			110	110		E
		1953	210		230	230		E
		1952			60	60		E
		1951	30		180	180		E
			22355		24110	30070		

Total Hanford

	22355	24110	30070

Total

Intertrac:
Outstanding Dosimeter:

*Internal Dose is CEDE

Only Hanford Occupational Doses are included on this Report

3.1.2

1.

EXID: Soc Sec Num: ex: Parameter Dates 10/01/1900 10/01/2099

Emergency Search For

Address

INTERTRAC MASTER RECORD

Eval ID	Open Date	P F	O F	R E	I I	A C	Begin Date	End Date	Int Mde	A R	D R	R S	Principal Radionuclides	50 Yr Com DOS Equiv

INCIDENT/SKIN CONTAMINATION

Inciden Num	Type	Date	Building	Area	Dose Received

BIOASSAY RESULTS

Isotope	Sample Date	T	R	Vol	K C	Eval ID	NS CD	P C	Analytical Result	Error	Limit	UN	D F
FP	04/11/1962	U		0600	8				3.07E-05				
PU	04/11/1962	U		0600	8				7E-09				
FP	01/26/1962	U		1300	8				3.07E-05				
FP	09/30/1959	U		1600	8				3.17E-05				
PU	09/30/1959	U		1600	8				1.1E-08				
FP	12/09/1958	U		0700	8				3.17E-05				
PU	12/09/1958	U		0700	8				1.1E-08				
PU	01/31/1958	U		0000	8								
U	03/22/1957	U		0000	8								
PU239	03/18/1957	U		0000									
U	03/18/1957	U		0000	8								
PU	03/08/1957	U		0000	8								
PU239	02/18/1957	U		0000									
U	02/18/1957	U		0000	8								
U	02/15/1957	U		0000	8								
PU239	01/25/1957	U		0000									
U	01/25/1957	U		0000	8								
PU	01/05/1957	U		0000	8								
PU239	10/29/1956	U		0000									
U	10/29/1956	U		0000	8								
PU	09/13/1956	U		0000	8								
PU	05/10/1956	U		0000	8								
PU	01/27/1956	U		0000	8								
PU	11/11/1955	U		0000	8								
PU	10/03/1955	U		0000	8								
PU	09/22/1955	U		0000	8								
PU	08/08/1955	U		0000	8								
PU	07/07/1955	U		0000	8								
PU	06/30/1955	U		0000	8								
U	06/30/1955	U		0000	8								
PU	06/27/1955	U		0000	8								
PU239	06/07/1955	U		0000									
U	06/07/1955	U		0000	8								
PU	04/28/1955	U		0000	8								
PU	12/30/1954	U		0000	8								
PU	09/20/1954	U		0000	8								
PU	06/21/1954	U		0000	8								
PU	01/14/1954	U		0000	8								
PU	08/10/1953	U		0000	8								
PU	02/02/1953	U		0000	8								

* No urinalysis report for 1952 began in 1953?

3.1.3

RADIOLOGICAL EXPOSURE
Individual Dosimeter History

Hid: SSN: Rex Id:

CC	Pay Id	NC	Begin Dt	End Dt	OC	Shall	Deep	Neut	Ring	Eye	Per End Dt
XX			01/01/1959	12/31/1959		90	90	0	0	0	12/31/1959
XX			01/01/1958	12/31/1958		890	890	0	0	0	12/31/1958
XX			01/01/1957	12/31/1957		1190	1190	0	0	0	12/31/1957
XX			01/01/1956	12/31/1956		600	600	0	0	0	12/31/1956
XX			01/01/1955	12/31/1955		0	0	0	3920	0	12/31/1955
XX			01/01/1955	12/31/1955		520	520	0	0	0	12/31/1955
XX			01/01/1954	12/31/1954		0	0	0	5150	0	12/31/1954
XX			01/01/1954	12/31/1954		60	60	0	0	0	12/31/1954
XX			01/01/1953	12/31/1953		0	0	0	3230	0	12/31/1953
XX			01/01/1953	12/31/1953		1280	870	0	0	0	12/31/1953
XX			01/01/1952	12/31/1952		0	0	0	820	0	12/31/1952
XX			01/01/1952	12/31/1952		560	490	0	0	0	12/31/1952
XX			01/01/1951	12/31/1951		0	0	0	570	0	12/31/1951
XX			01/01/1951	12/31/1951		1120	970	430	0	0	12/31/1951
XX			01/01/1950	12/31/1950		0	0	0	1450	0	12/31/1950
XX			01/01/1950	12/31/1950		3680	550	260	0	0	12/31/1950
XX			01/01/1949	12/31/1949		0	0	0	40	0	12/31/1949
XX			01/01/1949	12/31/1949		320	70	0	0	0	12/31/1949
XX			01/01/1948	12/31/1948		190	80	0	0	0	12/31/1948
XX			01/01/1947	12/31/1947		100	30	0	0	0	12/31/1947
XX			01/01/1946	12/31/1946		270	100	0	0	0	12/31/1946
XX			01/01/1945	12/31/1945		0	0	0	120	0	12/31/1945
XX			01/01/1945	12/31/1945		7430	1470	0	0	0	12/31/1945
XX			01/01/1944	12/31/1944		0	0	0	0	0	12/31/1944

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3.1.4

REXID: **Soc Sec Num** **Sex:** Parameter Dates: 10/01/1900 10/01/2099

Emergency Search For:

Address

INTERTRAC MASTER RECORD

Eval ID	Open Date	P F	O F	R E	I I	A C	Begin Date	End Date	Int Mde	A R	D R	R S	Principal Radionuclides	50 Yr Com DOS Equiv

INTERTRAC DEPOSITION RECORDS

Eval ID	Depo	Nuclid	Activity (NCI)	T-Rate (1/days)

INCIDENT/SKIN CONTAMINATION

Incident Num	Type	Date	Building	Area	Dose Received

BIOASSAY RESULTS

	Sample				K	Eval	NS	P	Analytical			D
Isotope	Date	T	R	Vol	C	ID	CD	C	Result	Error	Limit	UN	F
PU	03/27/1958	U		0000	8								
PU	06/07/1957	U		0000	8								
PU	04/13/1956	U		0000	8								
PU	04/14/1955	U		0000	8								
PU	03/15/1954	U		0000	8								
PU	10/26/1953	U		0000	8								
PU	10/04/1951	U		0000	8								
U	08/16/1951	U		0000	8								
PU	06/29/1950	U		0000	8								
PU	06/24/1949	U		0000	8								
PU	03/23/1948	U		0000	8								

INVIVO DISPLAY

Exam Date	BD CD	Isotp	Quantity	Error	LC/MDA	Count Length	RC	DT CD	H F	Eval ID
03/01/1962	WBD	CS137	4.8E+00				PR	A1		
03/01/1962	WBD	K 40	1.29E+02				PR	A1		
03/01/1962	WBD	NA 24					PR	A1		
03/01/1962	WBD	ZN 65	1E+00				PR	A1		

This report summarizes all bioassay data available in the REX electronic database. It is possible that additional bioassay data exist in microfilm records that have not been incorporated into REX, although it normally can be assumed that omitted records are inconsequential to dose calculations.

3.1.5

URANIUM URINALYSIS RESULTS

FLUORPHOTOMETRIC ANALYSIS

POST - EXPOSURE SAMPLE						PRE - EXPOSURE SAMPLE				
DATE SAMPLED	TIME SAMPLED	SAMPLE NO.	µg/L	pH	JOB DESIGNATION	DATE SAMPLED	TIME SAMPLED	SAMPLE NO.	µg/L	pH
8-16-51		7627	1.8	5.8	Rankin					

NAME

PAYROLL NO.

3.1.9

3.1.2

URINALYSIS FOR PLUTONIUM
RESULTS BASED ON 100 % RECOVERY

SAMPLE TAKEN	SAMPLE NUMBER	D/M SAMPLE	D/M BLANK	D/M SPIKE	µG	REMARKS
3-23-48	3-7435	.05 ± [.18]	26 ± [.2]	2.72 ± [.52]	<0.10	
6-24-49	3-14149	.16 ± [.12]	16 ± [.12]	3.60 ± [.44]		
[illegible]	[illegible]	± [illegible]	± [illegible]	± [illegible]		
10-4-[illegible]	[illegible]	± [illegible]	± [illegible]	± [50]		

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2-24-52

RTS # 2

3.1.7

Battelle Memorial Institute
P O BOX 999 • RICHLAND, WASHINGTON 99352 • TELEPHONE AREA CODE 509, 942-5111
PACIFIC NORTHWEST LABORATORY

Dear [redacted]

Records of external and internal exposure, including records of exposure that you may have received elsewhere, have been maintained throughout your Hanford employment. The radiation exposure you have received at Hanford is determined from measurements made by the personnel dosimetry programs. These measurements indicate for the 1966 exposure period DECEMBER 28, 1965 through MARCH 28, 1966 the whole body penetrating dose you received as a result of work at Hanford was .0 rems, including .0 roentgens. Your accumulated occupational whole body exposure is as follows:

	Dose (rems)
gamma, x-ray	.0
neutron	.0
tritium	.0
Total	.0

With the exception of tritium, which is included above, the whole body counter examination program, supplemented by bioassay data, indicates you received no deposition of radioactive materials which exceeded five percent of the applicable limit.

This letter was prepared as the official transcript of your occupational exposure status at the time of your termination from General Electric Company and transfer to FEDERAL SUPPORT SERVICES. A duplicate copy of this letter will be placed in your FEDERAL SUPPORT SERVICES exposure file. It is especially important, therefore, that you contact the Dosimetry Studies and Evaluation Section if there appear to be any discrepancies.

On the reverse side of this letter you will find a brief explanation of the current nationally recommended limits and a simple method for comparing your occupational exposure with these limits. You should contact your supervisor if you have any questions regarding the information reported in this letter; other information about your radiation exposure at Hanford; or the control system used to maintain exposures within established permissible limits.

W. E. Newton Jr

Manager
Dosimetry Studies and Evaluation Section
RADIATION PROTECTION DEPARTMENT

3.1.8

BATTELLE NORTHWEST
BATTELLE MEMORIAL INSTITUTE PACIFIC NORTHWEST LABORATORIES
P O BOX 999, RICHLAND, WASHINGTON 99352 / TELEPHONE 509-942-1111

8-09-71

Dear

Records of external and internal exposure, including records of exposure that you may have received elsewhere, have been maintained throughout your Hanford employment. The radiation exposure you have received at Hanford is determined from measurements made by the personnel dosimetry programs. These measurements indicate for the 1971 exposure period DECEMBER 23, 1970 through JUNE 27, 1971, the whole body penetrating dose you received as a result of work at Hanford was .0 rems, including .0 roentgens. Your accumulated occupational whole body exposure is as follows:

	Dose (rems)
gamma, x-ray	.6
neutron	.0
tritium	.0
Total	.6

The dose from any intake of tritium is included above. The whole body counter examination program, supplemented by bioassay data, indicates you received no other deposition of radioactive materials which exceeded five percent of the applicable limit.

This letter was prepared as the official transcript of your occupational exposure status at the time of your termination from ITT-FSS and transfer to ARHCO. A duplicate copy of this letter will be placed in your ARHCO exposure file. It is especially important, therefore, that you contact the Personnel Dosimetry Services Section if there appear to be any discrepancies.

On the reverse side of this letter you will find a brief explanation of the current nationally recommended limits and a simple method for comparing your occupational exposure with these limits. You should contact your supervisor if you have any questions regarding the information reported in this letter, other information about your radiation exposure at Hanford, or the control system used to maintain exposures within established permissible limits.

K. R. Heid
Manager
Personnel Dosimetry
RADIATION PROTECTION DEPARTMENT

3.1.9

ATE

Pacific Northwest
National Laboratory
Operated by Battelle for the
U.S. Department of Energy

July 16, 2001

Office of External Affairs
U. S. Department of Energy
Richland Operations Office
Richland, Washington 99352

Dear

/ SOCIAL SECURITY NUMBER

The Pacific Northwest National Laboratory maintains occupational radiation exposure records for all employees and visitors at Hanford. We have reviewed our records for radiation exposures received by the following individual:

_____ Social Security Number_____

Hanford Employee/Hanford Visitor	Dates From	To
HANFORD EMPLOYEE	-51	

	Exposure in Units of Rem			
	Whole Body Effective Dose Equivalent	Skin Dose Equivalent	Extremity Dose Equivalent	Eye Dose Equivalent
Current calendar year at Hanford	N/A	N/A	N/A	N/A
Total accumulated dose at Hanford	22.355	24.110	30.070	.000

According to our records, no internal doses were recorded for this individual while employed at or visiting Hanford.

This report is furnished to you under the reporting requirements of the U.S. Department of Energy.

Char Kison

Char Kison, Hanford Exposure Reporting
Radiation and Health Technology

cc M. E. Sharp, PNNL/K1-59
Personal Exposure File

3.2

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JUL 17 2001 3.2

Pacific Northwest National Laboratory
Operated by Battelle for the U.S. Department of Energy

August 27, 1997

To: Distribution

POTENTIAL UNRECORDED NEUTRON DOSE

DOE/RL has supported tasks under the Hanford External Dosimetry Project to describe historical Hanford dosimetry practices and to evaluate the accuracy of the recorded dose for Hanford workers. Several technical reports have been prepared (Wilson 1989; Wilson et al. 1990, Fix et al. 1994). Recorded dose from external radiation (i.e., beta particles, x-rays, gamma rays, and neutrons) for Hanford workers, obtained from individually worn dosimeters, have been used in national and international epidemiologic studies of nuclear workers (Gilbert et al. 1993a, 1993b, 1989; Cardis et al. 1995). A major objective of the epidemiologic studies is to provide a direct assessment of the carcinogenic risk of exposure to ionizing radiation at low doses and dose rates characteristic of occupational exposure. Accuracy of the recorded dose is important to the epidemiologic study objectives to estimate risks per unit of dose, and compare these estimates with those that serve as the basis for radiation protection standards. Dose guidelines in current standards have been obtained by extrapolation from data on persons exposed at high doses and dose rates such as the Japanese atomic bomb survivors.

Dosimetry evaluations conducted at Hanford (Wilson et al. 1990, Fix et al. 1994, 1997; Gilbert and Fix 1996) and by dosimetry subcommittees (Fix et al. 1997; Fix 1994) formed to participate in epidemiologic studies conducted by DOE and the International Agency for Research on Cancer (IARC) have concluded that dose may not be comparable in time or between facilities for recorded dose from low-energy photon or neutron radiation, and from internal intake. The dosimetry subcommittees recommended that the epidemiologic analyses ideally should be performed by excluding the relatively few workers with significant dose from radiation sources other than from higher energy (> 100 keV) photon (i.e., x-rays and gamma rays) radiation. The dosimetry subcommittees have concluded that recorded dose from higher energy photon radiation has been recorded accurately. The vast majority of recorded dose for Hanford workers is from higher energy photon radiation.

The focus of PNNL-11196 (Fix et al. 1997) was to specifically examine the issue of under-recorded neutron dose for Hanford plutonium workers prior to the use of the Hanford thermoluminescent dosimetry system implemented January 1, 1972. This report concludes that there is under-recorded neutron dose for plutonium workers during the period of 1950-71 when the Hanford Nuclear Track Emulsion, Type A, (NTA) film was used. This conclusion is based on examination of several technical studies and on examination of field studies comparing thermoluminescent and film dosimeter results performed during 1971-72. The magnitude of the under-recorded neutron dose is complex depending upon the specifics of the work performed by each worker during each year, and throughout their

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Telephone (509) 376-2466 ■ Email jj_fix@pnl.gov ■ Fax (509) 373-0167

3.3

working lifetime at Hanford. Importantly, there is no truly satisfactory method to retrospectively determine the neutron dose. The use of NTA film, which represented state-of-the-art capabilities in the 1950s and 60s, apparently resulted in unrecorded neutron dose at plutonium facilities throughout the world because of its relatively high (~ 1 MeV) energy threshold and the relatively low average energy (~1.2 MeV) of the neutrons from PuF_4 combined with further energy degradation of these neutrons from shielding in the work environment. Until the availability of thermoluminescent neutron dosimetry techniques during the middle to late 1960s and early 1970s, NTA film represented the only generally available neutron dosimeter. It was used throughout DOE, and other agency, facilities beginning in about 1950. As determined during the IARC dosimetry subcommittees, NTA was generally used throughout the world to measure neutron dose in plutonium work environments. It is widely recognized that unrecorded neutron dose occurred and identification of these workers (to exclude them from dose-effect analyses) was included in the IARC epidemiologic evaluations (Cardis 1995).

Once PNNL-11196 was prepared, an effort was conducted to identify workers with significant potential for unrecorded neutron dose at the Hanford Plutonium Finishing Plant (PFP). For each worker identified, a copy of this letter is to be placed in their individual exposure history file. As such, the dose data for any worker with a copy of this letter in their exposure history file should be used only with a full understanding of the uncertainty in the numerical value of the recorded dose. Information in PNNL-11196, along with the worker's employment and dose history, can be used to determine the approximate magnitude of the unrecorded neutron dose.

Jack J. Fix, Staff Scientist
HEALTH PROTECTION DEPARTMENT

JJF:jlc

Distribution: Individual Exposure History File
(c/o VL Berndt, PNNL)

Ms. Theresa L. Aldridge
DOE/RL, Health Physicist

Mr. Robert Southworth
DOE/RL, Office of Chief Council

References

Cardis, E., E. S. Gilbert, L. Carpenter, G. Howe, I. Kato, B. K. Armstrong, V. Beral, G. Cowper, A. Douglas, J. Fix, S. A. Fry, J. Kaldor, C. Lave, L. Salmon, P. G. Smith, G. L. Voelz and L. D. Wiggs. 1995. *"Effects of Low Doses and Low Dose Rates of External Ionizing Radiation: Cancer Mortality among Nuclear Industry Workers in Three Countries."* Radiat. Res., 142, pp 117-132.

Fix, J.J., Salmon, L., Cowper, G., and Cardis, E. 1997. *A Retrospective Evaluation of the Dosimetry Employed in an International Combined Epidemiological Study*. Manuscript submitted for publication.

Fix, J.J., R.H. Wilson and W.V. Baumgartner. 1997. *Retrospective Assessment of Personnel Neutron Dosimetry for Workers at the Hanford Site.* PNNL-11196, Pacific Northwest National Laboratory, Richland, WA.

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Fix, J. J. 1994. *Report From CEDR Dosimetry Working Group to CEDR Project Management.* PNL-8631, Pacific Northwest Laboratory, Richland, WA.

Gilbert, E.S., and J.J. Fix. 1996. *Laboratory Measurement Error in External Dose Estimates and Its Effects on Dose-Response Analyses of Hanford Worker Mortality Data.* PNNL-11289, Pacific Northwest National Laboratory, Richland, WA.

Gilbert, E.S., D.L. Cragle, and L.D. Wiggs. 1993. *Updated Analyses of combined mortality data on workers at the Hanford site, Oak Ridge National Laboratory, and Rocky Flats Weapons Plant.* Radiat. Res. 136: 408-421.

Gilbert, E.S., E. Omohundro, J.A. Buchanan et al. 1993. *Mortality of workers at the Hanford site: 1945-1986.* Health Phys. 64, 577-590.

Gilbert, E.S., S. A. Fry, L. D. Wiggs, G. L. Voelz, D.L. Cragle and G.R. Petersen. 1989. *Analyses of Combined Mortality Data on Workers at the Hanford Site, Oak Ridge National Laboratory, and Rocky Flats Nuclear Weapons Plant.* Radiat. Res., 120, pp 19-35.

Wilson, R.H., J.J. Fix, W.V. Baumgartner and L.L. Nichols. 1990. *Description and Evaluation of the Hanford Personnel Dosimeter Program From 1944 Through 1989.* PNL-7447, Pacific Northwest Laboratory, Richland, WA.

Wilson, R.H. 1989. *Historical Review of Personnel Dosimetry Development and its Use in Radiation Protection Programs at Hanford.* PNL-6125, Pacific Northwest Laboratory, Richland, WA.

STRICTLY PRIVATE

Pacific Northwest National Laboratory

Operated by Battelle for the U.S. Department of Energy

May 7, 2002

Ms. Sarah L. Prein / A7-75
Office of External Affairs
U. S. Department of Energy
Richland Operations Office
Richland, Washington 99352

Dear [redacted]

SOCIAL SECURITY NUMBER: [redacted]

The Pacific Northwest National Laboratory maintains occupational radiation exposure records for all employees and visitors at Hanford. We have reviewed our records for radiation exposures received by the following individual:

[redacted] Social Security Number: [redacted]

Hanford Employee/Hanford Visitor	Dates From	Dates To
HANFORD EMPLOYEE		
HANFORD EMPLOYEE		

	Exposure in Units of Rem			
	Whole Body Effective Dose Equivalent	Skin Dose Equivalent	Extremity Dose Equivalent	Eye Dose Equivalent
Current calendar year at Hanford	N/A	N/A	N/A	N/A
Total accumulated dose at Hanford	8.692	19.050	34.350	.000

According to our records, no internal doses were recorded for this individual while employed at or visiting Hanford.

This report is furnished to you under the reporting requirements of the U.S. Department of Energy.

Char Kison

Char Kison, Hanford Exposure Reporting
Radiation and Health Technology

cc M. E. Sharp, PNNL/K1-59
Personal Exposure File

14828

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3.5

REXID: **Soc Sec Num:** **Sex:** Parameter Dates: 10/01/1900 10/01/2099

Emergency Search For:

Address

INVIVO DISPLAY

Exam Date	BD CD	Isotp	Quantity	Error	LC/MDA	Count Length	RC	DT CD	H F	Eval ID
07/02/1979	WBD	K 40	9.3E+01		3.5E+00		PR	H		
07/02/1979	WBD	NA 24	6.8E-01		3.1E-01		PR	H		
07/02/1979	WBD	ZN 65			7.5E-01		PR	H		
08/02/1977	WBD	CS137	7.5E+01		6.6E-01		PR			
08/02/1977	WBD	K 40	1.3E+02		3.5E+00		PR			
08/02/1977	WBD	NA 24			3.1E-01		PR			
08/02/1977	WBD	ZN 65	6.1E+00		7.5E-01		PR			
06/20/1977	WBD	CS137	1.5E+01		6.6E-01		PR			
06/20/1977	WBD	K 40	1.4E+02		3.5E+00		PR			
06/20/1977	WBD	NA 24			3.1E-01		PR			
06/20/1977	WBD	ZN 65	3.2E+01		7.5E-01		PR			
04/03/1967	WBD	CS137	1.9E+01				PR	D1		
04/03/1967	WBD	K 40	1.06E+02				PR	D1		
04/03/1967	WBD	NA 24	2.5E-01				PR	D1		
04/03/1967	WBD	ZN 65	6.5E+00				PR	D1		
02/18/1961	HND	PU 23					SP	D1	X	

This report summarizes all bioassay data available in the REX electronic database. It is possible that additional bioassay data exist in microfilm records that have not been incorporated into REX, although it normally can be assumed that omitted records are inconsequential to dose calculations.

OFFICIAL USE ONLY

INVESTIGATION OF PERSONNEL RADIATION MONITOR RESULT

TO:

FROM: (EXPOSURE EVAL., RAD. PROT. OPER.)

NO.

DATE

FOR: (NAME)

PAYROLL NO.

THE PERSONNEL RADIATION MONITOR RESULT RECORDED BELOW WAS OBTAINED FOR THE ABOVE NAMED EMPLOYEE, AND REQUIRES INVESTIGATION TO DETERMINE THE EXPOSURE RECEIVED. PLEASE HAVE QUESTIONS 1 THROUGH 8 ANSWERED, AND RETURN ALL COPIES OF THIS FORM TO THE SENDER.

PERSONNEL MONITOR RESULT TO BE INVESTIGATED:

Neutron Film Dosimeter: Lost reading because dosimeters were left in
Finger Ring Dosimeter: 234-5 bldg. during criticality incident

(SUPPLEMENTARY RESULTS NOW KNOWN FOR THIS PERIOD ARE SHOWN IN TABLE (8) BELOW)

DATE: ~~3-23-62 thru 4-6-62~~

AREA: 200-W

1. WERE EMPLOYEE'S PERSONNEL METERS SUBJECTED TO UNUSUAL TREATMENT?

TIME OCCURRED

TIME REPLACED

2. LIST ALL PLANT AREAS IN WHICH THE EMPLOYEE WORKED DURING DATE OR PERIOD IN QUESTION:

3. FILL IN THE FOLLOWING TABLE FROM SURVEY AND EXPOSURE RECORDS TO SHOW ALL EXPOSURES EXCEEDING 1 mrem FOR THE PERSON DURING THE PERI[illegible] AREA

DATA FROM RADIATION MONITORING SURVEY AND EXPOSURE RECORDS

DATE	AREA & BLDG. NO.	SWP OR SOP NOS.	mrads BETA *	mr GAMMA*	NEUTRONS* mrem			INTERNAL mrem	TOTAL mrem	
					SN	IN	FN		BODY	HAND

*WHERE APPLICABLE DISTINGUISH HAND EXPOSURE BY "HE" OR HAND CONTAMINATION BY "HC" WHICH EXCEEDED 1 mrem AND CONTROLLED THE TIME LIMIT.

3.7

3.7

Pacific Northwest National Laboratory

Operated by Battelle for the U.S. Department of Energy

July 11, 2006

Dorothy C. Riehle
Office of External Affairs
U.S. Department of Energy
Richland, Operations Office
Richland, WA 99352-1000

Dear

The Hanford Radiological Exposure Records have been searched for all radiological exposure material relating to This information has been copied and is attached. As in the past, we have not sanitized the documents but have indicated those needing attention with a "flag" on the right-hand side of the page.

For comparison purposes, the DOE Dose Standard of 5,000 mrem is the maximum allowable occupational dose that a worker should receive in a calendar year. The average whole body dose from naturally occurring radiation (also known as background radiation) to all United States citizens is 300 mrem per year, based on a publication from the National Council on Radiation Protection and Measurements. The amount of radiation you receive naturally is influenced by where and how you live. For example, a person receives approximately 5 mrem for each cross-continental, round-trip airplane trip taken.

This package contains two reports, #HW-36018 and #HW-36124 "**THAT ARE NOT APPROVED FOR PUBLIC RELEASE**." Both are dated March 1955. The reports are marked with a pink flag.

Hanford records show that incurred three separate intakes of plutonium, resulting in a projected systemic uptake totaling 0.00548 microcuries of plutonium-alpha activity and 0.0457 microcuries of plutonium-241. A summary of the intakes is shown below, based on a July 12, 1985 evaluation report.

		Systemic Uptake (microcuries)	
Date	Mode	Pu-239	Pu-241
03/21/1955	Wound (acid burn)	0.000083	0.00065
12/22/1959	Inhalation	0.0029	0.025
05/23/1963	Inhalation	0.0025	0.020
	Cumulative Total	0.00548	0.0457

In addition, a slowly clearing lung burden of 0.021 microcuries of plutonium-alpha activity and 0.21 microcuries of plutonium-241 was associated with the 5/23/1963 inhalation.

The total uptake was categorized as approximately 19% of the maximum permissible body burden (MPBB) for plutonium (based on plutonium-239 MPBB of 0.04 microcuries and the plutonium-241 MPBB of 0.9 microcuries). The MPBBs used are contained in National Bureau of Standards Handbook No. 69 (1959) and International Commission on Radiological Protection Publication 2 (1959) and address bone as the critical organ. Because the worker terminated employment before the requirements for organ and effective dose equivalent calculation were instituted, no estimates of committed dose equivalent resulting from these uptakes were ever made.

A thorough search was completed, locating no records for [redacted] until 1950. [redacted]'s work history indicates he was issued a Payroll Number [redacted] but did not start work until 1948. Records indicate [redacted] was not monitored for Radiation Exposure until 1950.

Due to a reevaluation of [redacted]s doses, there were dose corrections made for 1950, 1954, 1956, 1959, 1961, 1962, and 1963. All radiation dose adjustment sheets are attached.

A review of reference documents in [redacted]s records indicates due to the poor quality of microfilm the ring dose for years 1951, 1952, 1953, and 1955 could not be verified. We believe the dose in the electronic database to be correct.

Whole body dose was corrected for 1957.

Whole body dose for 1954 and 1955 could not be verified due to the poor quality of prints.

A review of reference documents in [redacted]s records does not support the dose totals for 1960 in the electronic database. In conformance with Radiation Records policy, the electronic database records were not reduced even though they appear to have been entered in error.

The x-ray dose recorded in 1959 shows 59 for each month. This is assumed to be a programming error, and is really a print-out of the year. In 1959 it was Hanford practice to report Whole Body (penetrating) Dose as the sum of the gamma dose plus the neutron dose and 35% of the x-ray dose. The value printed for the calendar year gamma total is actually a total of gamma dose plus 35% of the x-ray dose. The skin dose (derma) was calculated as the sum of the whole body dose and the remaining 65% of the x-ray dose. H[redacted] does have 250mrem X-ray dose.

[redacted] is a registrant in the National Plutonium Registry as of 1969. He is also a registrant in the United States Transuranium and Uranium Registries as of 1994.

We have enclosed a master note code listing. A note code defines a frequency change, where the dose was received or how the dose was determined.

As described in a letter placed in [redacted]losimetry file in 1997 (copy included), recent studies have indicated there is under-recorded neutron dose for plutonium workers during the periods of 1950-71 when the Hanford Nuclear Track Emulsion, Type A, (NTA) film was used (NTA film was the only generally available neutron dosimeter during that period). However, the vast majority of recorded dose for Hanford workers is from higher energy photon radiation, and dosimetry evaluations conducted at Hanford have concluded that recorded dose from high energy photon radiation has been recorded accurately. If you wish to discuss further the contents of the 1997 letter, you may contact Steve Baker at (509) 376-6790.

If you wish to discuss further the contents of the letter, you may contact Steve Baker at (509) 376-6790.

Vickie L. Llewellyn for

Steven C. Baker, Manager
Hanford Radiation Records Program
Radiation and Health Technology

3.8

cc: Mary Sharp, PNNL/K1-59
Personal Exposure File

55-20000-002

HANFORD LABORATORIES
GENERAL ELECTRIC
RICHLAND, WASHINGTON
99352

August 25, 1958

STRICTLY PRIVATE

TABLE I
PLUTONIUM URINARY EXCRETION DATA

Incident Date	Sample Date	No. of Days Post Incident on: 3-21-55	12-22-59	5-23-58	d/m Pu Per Urine Sample (1)	(2)	(3)
3-21-55	3-22-55	1			0.37		
	3-30-55	9			0.01		
	4-20-55	30			0.01		
4-20-55	5-3-55				0.01		
	5-11-55				0.01		
	6-1-55				0.03		
	6-26-55				0.01		
	7-6-55				0.02		
	8-7-55				0.003		
	11-9-55				0.009		
	3-23-56				0.022		
3-22-56	4-24-56				0.04		
	5-1-56				0.002		
	5-11-56				0.003		
	9-20-56				0.016		
	3-14-57				0.015		
4-4-57	4-7-57				0.01		
	4-11-57				0.031		
	4-28-57				0.01		
	6-27-57				0.016		
	10-9-57				0.01		
	11-21-57				0.025		
	1-30-59				0.004		
	4-24-59				0.011		
	6-12-59				0.025		
	6-26-59				0.025		
	8-26-59				0.025		
	1-29-59				0.01		
	2-19-59				0.025		
	3-5-59				0.022		
	4-30-59				0.020		
	7-19-59				0.025		
	8-31-59				0.009		
10-23-59	10-23-59		1		2.40		
	10-25-59		3		Lost		
	11-6-59		14		0.097		
	11-21-59		29		0.109		
	11-29-59		37		0.730	0.5	

3.9 A

54-3000-438

GENERAL ELECTRIC

[illegible] PRIVATE -2- August 26, 1963

Incident Date	Sample Date	No. of Days Post Incident on: 3-21-55	12-22-59	5-23-63	d/m Pu Per Urine Sample (1)	(2)	(3)
	2-4-60		44		0.911	0.76	
	2-6-60		46		0.595	0.45	
	3-23-60		92		0.686	0.60	
	4-14-60		114		0.573	0.49	
	5-4-60		134		0.422	0.36	
	6-9-60		170		Lost	-	
	7-15-60		206		0.31[illegible]	0.27	
	8-30-60		252		Lost	-	
	9-29-60		281		0.35[illegible]	0.32	
	11-2-60		316		Lost	-	
	11-16-60		330		0.319	0.28	
	2-1-61		407		0.220	0.19	
2-12-61	2-19-61		425		0.175	0.15	
	2-25-61		431		Lost	-	
	4-25-61		490		Lost	-	
	7-18-61		574		0.159	0.15	
	11-4-61		683		0.044	0.024	
	10-17-62		1030		0.149	0.13	
	1-23-63		1128		0.051	0.037	
	2-25-63		1152		0.059	0.047	
	5-19-63		1241		0.025	0.012	
5-23-63	5-24-63		1249	1	0.095	0.072	0.048
	5-25-63		1250	2	0.12	0.11	0.026
	5-26-63		1251	3	0.087	0.074	0.050
	5-27-63		1252	4	0.084	0.071	0.047
	5-28-63		1253	5	0.11	0.097	0.073
	5-29-63		1254	6	0.092	0.080	0.045
	5-30-63		1255	7	no sample	-	
	5-31-63		1256	8	no sample	-	
	6-6-63		1262	14	0.10	0.088	0.054
	6-13-63		1269	21	<0.025	<0.025	<0.025
	6-20-63		1276	28	0.076	0.064	0.041
	6-27-63		1283	35	0.074	0.062	0.039
	7-2-63		1288	40	<0.025	<0.025	<0.025

(1) Uncorrected data.
(2) Data corrected for influence of initially soluble plutonium deposited on 12-22-59.
(3) Data corrected for influence of initially soluble and partially insoluble plutonium deposited on 12-22-59.

39B

RADIATION OCCURRENCE

RADIATION OCCURRENCE NUMBER [illegible]

DATE 2-18-61 TIME 1:30 p.m.

LOCATION

COMPLETE DESCRIPTION

A process operator received a minute skin break on his right index finger (contaminated to 30,000 d/m), while breaking a piece of process metal with a hammer in Hood 21. He rubbed his hand across the broken edge of one of the pieces and cut his gloves and skin. The shallow skin break could only be identified with a magnifying glass and did not bleed. The contamination was reduced to non-detectable very easily. The body monitor count was 2.2×10^{-4} uc Pu at the break. No effort was made to reduce this small amount of plutonium from the finger. A bio-assay sample was taken and the results are pending.

CAUSES

The operator was breaking a piece of process material with a hammer and a piece of material cut his gloves, he received a minute skin break, resulting in contamination to his finger.

TYPE OF OCCURRENCE

3. Skin contamination of 30,000 d/m.
4. Injury caused by an object contaminated with Plutonium.

CC

[illegible]
[illegible]
[illegible] (3)
[illegible]
Circulating Copy

RECOMMENDATIONS AND ACTION TAKEN

1. All operators in Fabrication to be cautioned on extreme care while working with process material. Alertness on the job, by all operators can show a great improvement, should be emphasized.

INVESTIGATED BY [illegible]/ [illegible]

DATE OF INVESTIGATION [illegible]-61

EXPOSED EMPLOYEES

[illegible]

BEST AVAILABLE COPY

3-6040-003 (11-56)

3.10

Date 2-18-61
Time of Report 3 PM
Reported by Parkins 7564

Informal ____
P.O.E. ____
G.E. ____

RADIATION INCIDENT REPORT

Employee	Pr & Suffix	Craft	Home Address
	3199-6990	operator	

Date 2-18-61 Time 1 PM Bldg 234-5 Area 200 West

Mode of Intake: Injection
(Inhal. Absorp. Injection etc.)

Type of Contamination
Airborne Liquid Airborne Particulate
Vapor ___ Liquid ___ Dry Particulate ✓

EXTERNAL IRRADIATION CASES

Type of radiation(if known) ____
Estimate of irradiation time ____
Badge Film pulled ____ (time and date)
Maximum dose rate ____
Pencil Readings ____
SWP or SOP # ____ (if applicable)

INTERNAL CONTAMINATION

Type of Material ____
Samples:
Sputum (wet or dry) ____
Blood (wet or dry) ____
Air ____
Maximum Reading ____
Right Nasal (wet or dry) ____
Left Nasal (wet or dry) ____
Irrigation performed ____
Reduced to ____

Area of body affected ____
Original Reading ____
Reduced to ____

SKIN CONTAMINATION

Type of Material ____
Reduced to ____
Part of body affected ____
Decontamination Agent used ____
Condition of Skin ____
Maximum Reading ____
Elapsed Time ____
Tourniquet applied ____

Laceration

GENERAL

Description of Incident: Breaking up a pipe with hammer. slipped + felt a sliver in finger or got a cut - no blood but thing cut seen with magnif, Possible injection from metalaliser [illegible] to right index finger

finger

Hood 21

location of supposed injury not visible to naked eye. JP

3.10

OFFICIAL USE ONLY

MEMORANDUM

PERSONNEL RADIATION EXPOSURE INCIDENT

EMPLOYEE'S NAME | PAYROLL NUMBER

CLASS II NO.	CLASS I NO.	INFORMAL CPD	DATE OF INCIDENT 2-18-61	100 AREAS	200 AREAS West 234-5 Hood 21

PROBABLE ROUTE OF CONTAMINANT INTAKE:

☐ INGESTION ☑ INJECTION ☐ INHALATION ☐ ABSORPTION

TYPE OF CONTAMINANT:

☑ PU ☐ FP ☐ U

BIOASSAY SAMPLES REQUESTED:

☑ URINE ☐ FECES

2/18 & 2/24

ORIGINAL ESTIMATE OF EXPOSURE:

INTERNAL - Finger cont. to 3,000 d/m, reduced to non-detectable

EXTERNAL Body monitor count was 2.2×10^{-4} µc Pu at break

REFERENCE DOCUMENTS	
NUMBER	DATE OF ISSUE

SIGNED: | DATE

EXPOSURE INVESTIGATION,
HANFORD LABORATORIES OPERATION

☐ CASE HISTORY FILED BY DATE

☐ EXPOSURE RECORD ☐ MEDICAL RECORDS ☐ EXPOSURE INVESTIGATION

A-7800-040 (7-57)

OFFICIAL USE ONLY

3.10

SKIN DECONTAMINATION RECORD

NAME AND P. R. ; J.

DATE	TIME OF INCIDENT	AM / PM	AREA	BLDG.	OR	SURVEY LOG NO.
2-18-61	1325	PM	200-W	234-5	Bennett	44357

TIME	SURVEY INST.	SKIN AREA CONCERNED	SURVEY READING SHOW UNITS	DECONTAMINATION AGENT USED	SKIN CONDITION BEFORE AND AFTER TREATMENT, REMARKS, ETC.
1325	3PPY	R H INDEX FINGER	36,000 d/m	SOAP & WATER	<500 d/m

A-7800-079 (2-59)

(CONTINUE ON OTHER SIDE)

the contamination occurred in right forefinger.

Count with the counter showed 500 d/m present. This amount too small to warrant further decontamination of the finger.

Counting done by

To: Employee Exposure Record Folder

Employee _____

_____

Evaluations, documents and information regarding plutonium deposition cases are maintained in a record file designated as Plutonium Deposition Cases.

J. M. Selby

J. M. Selby, Specialist
Composite Dose Studies & Records
RADIATION PROTECTION OPERATION

JMS:bwc

3.11

PAY ID	HID	YEAR	WHOLE BODY EXTERNAL	WHOLE BODY INTERNAL*	SKIN	EXTREMITY	EYE	PC
		1972	320		320	320		E
		1971	1880		1950	1950		E
		1970	1720		1750	1750		E
		1969	2694		2760	2760		E
		1968	1280		1280	1280		E
		1967	1490		1490	1490		E
		1966	2651		2670	2670		E
		1965	2890		2890	2890		E
		1964	1030		1060	1810		E
		1963	1030		1030	3740		E
		1962	1240		1310	1310		E
		1961	460		470	470		E
		1960	460		530	530		E
		1959	340		340	340		E
		1958	1290		1330	1330		E
		1957	760		830	830		E
		1956	280		720	720		E
		1955	300		800	3300		E
		1954			110	110		E
		1953	210		230	230		E
		1952			60	60		E
		1951	30		180	180		E
XX			22355		24110	30070		
Total Hanford			22355		24110	30070		

Total

Intertrac:
Outstanding Dosimeter:

*Internal Dose is CEDE

Only Hanford Occupational Doses are included on this Report

2.12

1.

:EXID: 043020 Soc Sec Num: Sex: Parameter Dates 10/01/1900 10/01/2099

:mergency Search For

\ddress

INTERTRAC MASTER RECORD

Eval ID	Open Date	P F	O F	R E	I I	A C	Begin Date	End Date	Int Mde	A R	D R	R S	Principal Radionuclides	50 Yr Com DOS Equiv

INCIDENT/SKIN CONTAMINATION

Inciden Num	Type	Date	Building	Area	Dose Received

BIOASSAY RESULTS

Isotope	Sample Date	T	R	Vol	K C	Eval ID	NS CD	P C	Analytical Result	Error	Limit	UN	D F
FP	04/11/1962	U		0600	8				3.07E-05				
PU	04/11/1962	U		0600	8				7E-09				
FP	01/26/1962	U		1300	8				3.07E-05				
FP	09/30/1959	U		1600	8				3.17E-05				
PU	09/30/1959	U		1600	8				1.1E-08				
FP	12/09/1958	U		0700	8				3.17E-05				
PU	12/09/1958	U		0700	8				1.1E-08				
PU	01/31/1958	U		0000	8								
U	03/22/1957	U		0000	8								
PU239	03/18/1957	U		0000									
U	03/18/1957	U		0000	8								
PU	03/08/1957	U		0000	8								
PU239	02/18/1957	U		0000									
U	02/18/1957	U		0000	8								
U	02/15/1957	U		0000	8								
PU239	01/25/1957	U		0000									
U	01/25/1957	U		0000	8								
PU	01/05/1957	U		0000	8								
PU239	10/29/1956	U		0000									
U	10/29/1956	U		0000	8								
PU	09/13/1956	U		0000	8								
PU	05/10/1956	U		0000	8								
PU	01/27/1956	U		0000	8								
PU	11/11/1955	U		0000	8								
PU	10/03/1955	U		0000	8								
PU	09/22/1955	U		0000	8								
PU	08/08/1955	U		0000	8								
PU	07/07/1955	U		0000	8								
PU	06/30/1955	U		0000	8								
U	06/30/1955	U		0000	8								
PU	06/27/1955	U		0000	8								
PU239	06/07/1955	U		0000									
U	06/07/1955	U		0000	8								
PU	04/28/1955	U		0000	8								
PU	12/30/1954	U		0000	8								
PU	09/20/1954	U		0000	8								
PU	06/21/1954	U		0000	8								
PU	01/14/1954	U		0000	8								
PU	08/10/1953	U		0000	8								
PU	02/02/1953	U		0000	8								

* No urinalysis report for 1952 began in 1953?

3.13

RADIOLOGICAL EXPOSURE
Individual Dosimeter History

Hid: SSN: __ Rex Id:

CC	Pay Id	NC	Begin Dt	End Dt	OC	Shall	Deep	Neut	Ring	Eye	Per End Dt
XX			01/01/1959	12/31/1959		90	90	0	0	0	12/31/1959
XX			01/01/1958	12/31/1958		890	890	0	0	0	12/31/1958
XX			01/01/1957	12/31/1957		1190	1190	0	0	0	12/31/1957
XX			01/01/1956	12/31/1956		600	600	0	0	0	12/31/1956
XX			01/01/1955	12/31/1955		0	0	0	3920	0	12/31/1955
XX			01/01/1955	12/31/1955		520	520	0	0	0	12/31/1955
XX			01/01/1954	12/31/1954		0	0	0	5150	0	12/31/1954
XX			01/01/1954	12/31/1954		60	60	0	0	0	12/31/1954
XX			01/01/1953	12/31/1953		0	0	0	3230	0	12/31/1953
XX			01/01/1953	12/31/1953		1280	870	0	0	0	12/31/1953
XX			01/01/1952	12/31/1952		0	0	0	820	0	12/31/1952
XX			01/01/1952	12/31/1952		560	490	0	0	0	12/31/1952
XX			01/01/1951	12/31/1951		0	0	0	570	0	12/31/1951
XX			01/01/1951	12/31/1951		1120	970	430	0	0	12/31/1951
XX			01/01/1950	12/31/1950		0	0	0	1450	0	12/31/1950
XX			01/01/1950	12/31/1950		3680	550	260	0	0	12/31/1950
XX			01/01/1949	12/31/1949		0	0	0	40	0	12/31/1949
XX			01/01/1949	12/31/1949		320	70	0	0	0	12/31/1949
XX			01/01/1948	12/31/1948		190	80	0	0	0	12/31/1948
XX			01/01/1947	12/31/1947		100	30	0	0	0	12/31/1947
XX			01/01/1946	12/31/1946		270	100	0	0	0	12/31/1946
XX			01/01/1945	12/31/1945		0	0	0	120	0	12/31/1945
XX			01/01/1945	12/31/1945		7430	1470	0	0	0	12/31/1945
XX			01/01/1944	12/31/1944		0	0	0	0	0	12/31/1944

16 of 28

3.1.4

Sex:

Parameter Dates: 10/01/1900 10/01/2099

Emergency Search For:

Address

INTERTRAC MASTER RECORD

Eval ID	Open Date	P F	O F	R E	I I	A C	Begin Date	End Date	Int Mde	A R	D R	R S	Principal Radionuclides	50 Yr Com DOS Equiv

INTERTRAC DEPOSITION RECORDS

Eval ID	Depo	Nuclid	Activity (NCI)	T-Rate (1/days)

INCIDENT/SKIN CONTAMINATION

Incident Num	Type	Date	Building	Area	Dose Received

BIOASSAY RESULTS

Isotope	Sample Date	T	R	Vol	K C	Eval ID	NS CD	P C	Analytical Result	Error	Limit	UN	D F
PU	03/27/1958	U		0000	8								
PU	06/07/1957	U		0000	8								
PU	04/13/1956	U		0000	8								
PU	04/14/1955	U		0000	8								
PU	03/15/1954	U		0000	8								
PU	10/26/1953	U		0000	8								
PU	10/04/1951	U		0000	8								
U	08/16/1951	U		0000	8								
PU	06/29/1950	U		0000	8								
PU	06/24/1949	U		0000	8								
PU	03/23/1948	U		0000	8								

INVIVO DISPLAY

Exam Date	BD CD	Isotp	Quantity	Error	LC/MDA	Count Length	RC	DT CD	H F	Eval ID
03/01/1962	WBD	CS137	4.8E+00				PR	A1		
03/01/1962	WBD	K 40	1.29E+02				PR	A1		
03/01/1962	WBD	NA 24					PR	A1		
03/01/1962	WBD	ZN 65	1E+00				PR	A1		

This report summarizes all bioassay data available in the REX electronic database. It is possible that additional bioassay data exist in microfilm records that have not been incorporated into REX, although it normally can be assumed that omitted records are inconsequential to dose calculations.

URANIUM URINALYSIS RESULTS

FLUORPHOTOMETRIC ANALYSIS

POST - EXPOSURE SAMPLE						PRE - EXPOSURE SAMPLE				
DATE SAMPLED	TIME SAMPLED	SAMPLE NO.	µg/L	pH	JOB DESIGNATION	DATE SAMPLED	TIME SAMPLED	SAMPLE NO.	µg/L	pH
8-16-51		7627	1.8	5.8	Ramlam					

NAME

PAYROLL NO.

8/16

URINALYSIS FOR PLUTONIUM
RESULTS BASED ON 100 % RECOVERY

SAMPLE TAKEN	SAMPLE NUMBER	D/M SAMPLE	D/M BLANK	D/M SPIKE	µG	REMARKS
3-23-48	3-7435	.05 ± [.12]	.24 ± [.12]	2.72 ± [.50]	<0.10	
[illegible]-24-49	3-14149	.16 ± [.12]	.16 ± [.12]	3.62 ± [.44]		
[illegible]	[illegible]	± [illegible]	[illegible]	[illegible] ± [illegible]		
[illegible]	[illegible]	[illegible] ± [illegible]	[illegible] ± [illegible]	[illegible] ± [.50]		
		± [ ]	± [ ]	± [ ]		
		± [ ]	± [ ]	± [ ]		
		± [ ]	± [ ]	± [ ]		
		± [ ]	± [ ]	± [ ]		
		± [ ]	± [ ]	± [ ]		
		± [ ]	± [ ]	± [ ]		
		± [ ]	± [ ]	± [ ]		
		± [ ]	± [ ]	± [ ]		
		± [ ]	± [ ]	± [ ]		
		± [ ]	± [ ]	± [ ]		

BEST AVAILABLE COPY

2-24-52

RTS # 2

3.1.7.

Battelle Memorial Institute

P. O. BOX 999 • RICHLAND, WASHINGTON 99352 • TELEPHONE AREA CODE 509, 942-1111

PACIFIC NORTHWEST LABORATORY

[illegible] [illegible]

Dear

Records of external and internal exposure, including records of exposure that you may have received elsewhere, have been maintained throughout your Hanford employment. The radiation exposure you have received at Hanford is determined from measurements made by the personnel dosimetry programs. These measurements indicate for the 1966 exposure period DECEMBER 31, 1965 through MARCH 29, 1966 the whole body penetrating dose you received as a result of work at Hanford was .0 rems, including .0 roentgens. Your accumulated occupational whole body exposure is as follows:

	Dose (rems)
gamma, x-ray	.5
neutron	.0
tritium	.0
Total	.5

With the exception of tritium, which is included above, the whole body counter examination program, supplemented by bioassay data, indicates you received no deposition of radioactive materials which exceeded five percent of the applicable limit.

This letter was prepared as the official transcript of your occupational exposure status at the time of your termination from General Electric Company and transfer to FEDERAL SUPPORT SERVICES. A duplicate copy of this letter will be placed in your FEDERAL SUPPORT SERVICES exposure file. It is especially important, therefore, that you contact the Dosimetry Studies and Evaluation Section if there appear to be any discrepancies.

On the reverse side of this letter you will find a brief explanation of the current nationally recommended limits and a simple method for comparing your occupational exposure with these limits. You should contact your supervisor if you have any questions regarding the information reported in this letter, other information about your radiation exposure at Hanford, or the control system used to maintain exposures within established permissible limits.

C. E. Newton Jr

Manager
Dosimetry Studies and Evaluation Section
RADIATION PROTECTION DEPARTMENT

BATTELLE NORTHWEST
BATTELLE MEMORIAL INSTITUTE
PACIFIC NORTHWEST LABORATORIES
P O BOX 999, RICHLAND, WASHINGTON 99352 / TELEPHONE 509-942-7111

8F25

Dear [redacted]

Records of external and internal exposure, including records of exposure that you may have received elsewhere, have been maintained throughout your Hanford employment. The radiation exposure you have received at Hanford is determined from measurements made by the personnel dosimetry programs. These measurements indicate for the 1971 exposure period DECEMBER 23, 1970 through JUNE 27, 1971, the whole body penetrating dose you received as a result of work at Hanford was .0 rems, including .0 roentgens. Your accumulated occupational whole body exposure is as follows:

	Dose (rems)
gamma, x-ray	.0
neutron	.0
tritium	.0
Total	.0

The dose from any intake of tritium is included above. The whole body counter examination program, supplemented by bioassay data, indicates you received no other deposition of radioactive materials which exceeded five percent of the applicable limit.

This letter was prepared as the official transcript of your occupational exposure status at the time of your termination from ITT-FSS and transfer to ARHCO. A duplicate copy of this letter will be placed in your ARHCO exposure file. It is especially important, therefore, that you contact the Personnel Dosimetry Services Section if there appear to be any discrepancies.

On the reverse side of this letter you will find a brief explanation of the current nationally recommended limits and a simple method for comparing your occupational exposure with these limits. You should contact your supervisor if you have any questions regarding the information reported in this letter, other information about your radiation exposure at Hanford, or the control system used to maintain exposures within established permissible limits.

K. R. Held

K. R. Held
Manager
Personnel Dosimetry
RADIATION PROTECTION DEPARTMENT

3.19

Battelle
Pacific Northwest Laboratories
Battelle Boulevard
Richland, Washington 99352
Telephone (509) 942-6063

08/09/77

An EXP-M36 Report, Hanford Occupational Dose Record for Employee, prepared on 08/05/77, has been placed in this folder to reflect the external occupational radiation exposure status of the employee as of the date of transfer from Atlantic Richfield Hanford Company to Rockwell Hanford Company on July 1, 1977.

With the exception of tritium, which is included in the Report, Whole Body Counts, Chest Counts, and Bioassay data indicate the employee received no internal deposition of radioactive material in excess of 5 percent of the applicable limit.

Further details concerning the division of responsibilities between Atlantic Richfield Hanford Company and Rockwell Hanford Company, which affect the Occupational Exposure Records, are available in both of the companies' Exposure Records Historical File.

Very truly yours,

K. R. Heid

K. R. Heid, Manager
Personnel Dosimetry

3.20

Battelle
Pacific Northwest Laboratories

62522

Project Number

Internal Distribution

Date August 8, 1978

To Rockwell Hanford Operations
Individual Exposure Files

File
LB

From

Subject Rockwell Hanford Operations Basic
Dosimeter Results NC 19

Rockwell Hanford Operations basic dosimeters with an exchange date of June 30, 1978, were for the most part worn from July 1, 1977 to June 30, 1978. (See Historical File for letter dated December 12, 1977, WF Heine, RHO, to DOE, subject: Year-End Dosimeter Exchange - Contract EY-77-C-06-1030.)

The results from these basic dosimeters will be reported as 1978 exposure and identified by a NC 19.

- Note Code 19 - Rockwell Hanford Operations Basic Dosimeter results. Dosimeter was worn from 07-01-77 to 06-30-78, and the dose amount assigned to Calendar Year 1978.

This action was discussed and agreed upon by RHO and DOE representatives. (See Historical File for letter dated July 19, 1978, , RHO, to ject: Rockwell Hanford Operations Basic Dosimeter Results.)

3, 21

STRICTLY PRIVATE

DATE: May 8, 2002

TO: PNNL

FROM: / PNNL

SUBJECT: EEOICP Claim #
;S

Per your request, I have attached the following items relating to

1) Contractor Work History,
2) Individual Dosimeter History ,
3) Hanford Occupational Lifetime Totals by Year, and
4) Bioassay Results and In Vivo Record.

According to our records, no internal doses were recorded for this individual while employed at Hanford.

If you need additional information, please give me a call on

Thanks/Sally

xc Personal Exposure File

AFFIDAVIT FOR SPECIAL EXPOSURE COHORT PETITION

As instructed by the government Officials, I submitted Freedom of Information Act requests for the purpose of the recovering of _____ (my father) personnel, dosimetry, and medical records. I filed the records on behalf of my stepmother[redacted]e and myself as we are classified as being survivor beneficiaries. Two exact copies were filed according to the "Energy Employee Occupational Illness Program Act of 2000" (EEOICP) instructions. The EEOICP came into effect July 31, 2001. I released the compiled discovery records to the EEOICP Subtitle B and Subtitle D aka E administrators during that timeframe. Attached is a copy of my father's dosimetry records I received for review.

In 1952, my father's peer group function manager died after receiving acute radiation exposure that caused body burns that were detected by a Chicago autpsy expert. The function manager died of his acute radiation exposure. Subsequently, I believe that the missing 1952 and 1954 dosimetry records were manipulated for the purpose of censoring data regarding anomaly radiation exposure. My father was denoted as being "acutely ill" by 1962. His illness began after 1951. He affims anomaly expousre incidents which he apporved with his signature. His dose

4.1

equivalent was 30,070 mrem from 1951 to 1972 which does not include the missing dosimetry years.

STATE OF WASHINGTON
Country of Benton. I certify that I know or have satisfactory evidence that [redacted] igned this instrument and acknowledge it to be her free and voluntary act for the use or purposes mentioned in the instrument.

Signature of Notary Public Bambi Hallquist Dated 5/20/08

Notary Public Bambi Hallquist Title Notary

My appointment expires 5/20/2008

4.1

May 30, 2006

We authorize to release copies of my mother's EEOICP case to
only the special exposure cohort petition.

4.2

May 30, 2006

We authorize to release copies of my mother's EEOICP case to only the special exposure cohort petition.

May 30, 2006

We authorize to release copies of my mother's EEOICP case to M or only the special exposure cohort petition.

4.2

12-21-03

AFFIDAVIT OF

State of Washington)
) SS.
County of Benton)

12-21-03

I, of lawful age and duly sworn upon her oath, deposes and states:

1. I am the sister to .

2. I remember my sister was driven home by her company after being over exposed to radiation while on the job.

3. I remember a newspaper article written about her incident, relating to her over exposure of radiation received while working in a lab, along with her picture and her manager's on the front page, which went into detail discussing the over exposure of radiation she received. The article also indicated how her manager picked her while still in her lab whites and carried and put her in the shower.

DATED THIS 21st DAY OF Dec, 2003.

Bobbie C Curry

Bobbie C. Curry
467 N. 61st
West Richland, WA 99353
(509) 967-3705

STATE OF WASHINGTON)
) ss
County of Benton)

JOAN I. PEDERSEN NOTARY PUBLIC COMMISSION EXPIRES OCTOBER 26, 2004 STATE OF WASHINGTON

Joan I Pedersen

NOTARY PUBLIC in and for the State of Washington.
My commission expires 10/26/2004

43

AFFIDAVIT OF

State of Washington)
)
County of Benton) SS.
)

I, and
of lawful age and duly sworn upon my oath, deposes and states that to the best of my knowledge, that these are my recollection of events as related to me many times by my mother, [redacted].

She would relate stories of her working at Hanford. She started in the cafeteria and progressed to a working as a laboratory technician. She told me of how the Richland area was so desolate and of the sand storms she endured. She related stories of living in a women's dormitory, even though she was married at the time.

She also told me of her terror when she had a radiation exposure. To my best recollection of her exposure, she told me the following:

1. She said she was working in a "hot" lab with her arms inserted through long gloves that protruded into a transparent "box".
2. At the end of the day, she walked through a hallway monitoring system and the radiation alarm sounded.
3. Immediately, supervisors stopped her and rushed her to showers in the hallway.
4. After rinsing her off fully clothed, she was put into a private shower area where she disrobed and an assistant scrubbed her until she felt raw and sore all over.
5. She was driven home by her supervisor, because by then she had missed her bus ride home.
6. She said she was terrified - she didn't quite know what to expect regarding health risks, especially since she was pregnant.

Shortly thereafter, because of her pregnancy, she was transferred.

DATED THIS 18th DAY OF Dec., 2003.

JOAN I. PEDERSEN NOTARY PUBLIC STATE OF WASHINGTON COMMISSION EXPIRES 10-26-2004

STATE OF WASHINGTON)
) ss
County of Benton)

Joan I Pedersen
NOTARY PUBLIC in and for the
State of Washington.
My commission expires 10/26/2004

4.4

AFFIDAVIT OF

State of Washington)
)
County of Benton) SS.
)

I, _____ son of,
of lawful age and duly sworn upon my oath, deposes and states that to the best of my knowledge, that my mother _____

told me:

1. While working in a hot box is when she was exposed and contaminated with radiation, and at the time, she was pregnant.
2. When she became contaminated, she did not know it until the time she went to leave, and the monitors went off.
3. She had to be scrubbed with and without her clothes on.
4. The authorities determined later, that others had been exposed as well, and had to pick the individuals up from their homes to get scrubbed.

In addition, in 2001, I was also diagnosed having a slowing growing tumor called cholesteatoma in and by my right ear. It required immediate surgery. Since, this type of tumor returns, I was required to undergo a second (residual) and reconstruction surgery. A follow-up scan identified another tumor on and in the other ear(left) side. It was required to undergo another surgery, which was much more extensive, and much more difficult. The tumor had ruptured the cranium, and brain matter had to be removed, which caused my to have brain damage. Because of these tumors, I not only have brain damage, but have seizures, severe headaches and convulsions. I am no longer able to work, and am disabled. My tumors were so advanced, that, I see on a frequent basis, my local specialist, and specialist in Seattle. I will always require further follow-up care, and possibly further surgeries.

DATED THIS 18 DAY OF Dec., 2003.

JOAN I. PEDERSEN NOTARY PUBLIC STATE OF WASHINGTON COMMISSION EXPIRES OCTOBER 26, 2004

STATE OF WASHINGTON)
) ss
County of Benton)

Joan I Pedersen
NOTARY PUBLIC in and for the State of Washington.
My commission expires 10/26/2004 4.5

AFFIDAVIT OF

State of Washington)
)
County of Benton) SS.
)

I, _____,

of lawful age and duly sworn upon my oath, deposes and states that to the best of my knowledge, that my mother,

1. Told me that she got radiation when she was pregnant (with my brother or me) and that the Dr's didn't know if it had done any damage or not.
2. Mom said that they took all her clothes off and scrubbed her till she was raw and they took her to the hospital for some tests.
3. She said she thinks "that's why I was born so small and always had health problems as an infant."
4. Mom said back then, it was always hush hush.
5. I remember seeing an article in the paper when I got older.

In addition, in 1987, I was diagnosed having a slowing growing tumor called cholesteatoma in and by my left ear. It required immediate surgery. Since, this type of tumor returns, I was required to undergo a second (residual) surgery, and follow-up checkups in Seattle annually.

DATED THIS 18th DAY OF December, 2003.

STATE OF WASHINGTON)
) ss
County of Benton)

JOAN I. PEDERSEN NOTARY PUBLIC STATE OF WASHINGTON COMMISSION EXPIRES OCTOBER 26, 2004

Joan I. Pedersen
NOTARY PUBLIC in and for the State of Washington.
My commission expires 10/26/2004

4.6

AFFIDAVIT OF -------

State of Washington)
)
County of Benton) SS.
)

I,

)f lawful age and duly sworn upon my oath, deposes and states that to the best of my knowledge, that my mother,

1. Told me that she got an over exposure to radiation at work, and she was pregnant.
2. In 1995, when we took her to Seattle for another opinion, grasping at anything to save her. The doctor's indicated her cancers were separate primary types, which is very unusual. (Breast and Lung). In addition, due to having Breast Cancer so early in age, she had severe osteoporosis.
3. When she returned from Seattle, the doctor from Seattle called her. She began sobbing uncontrollably. She said that he told her that she very likely had a "third primary" type of cancer, being Multiple Myeloma of the Bone. Her primary care physician, Dr. was told this. Since she was in "guarded" condition, and with just a few more months to live, nothing further was done to confirm the diagnosis.

Since both my brother, T ave had cholesteatoma tumors, I have annual checkups with their doctor to check for this type of tumor. Also, I don't know if it's related to Mom's exposure, but I have been unable to have children.

DATED THIS 22 DAY OF December, 2003.

ıe
20

STATE OF WASHINGTON
County of Benton)

JOAN L. PEDERSEN NOTARY PUBLIC STATE OF WASHINGTON COMMISSION EXPIRES OCTOBER 25, 2006

Joan L. Pedersen
NOTARY PUBLIC in and for the
State of Washington.
My commission expires 10/25/2006

4.7

ocuments

Handwritten Diary

Note: The following is a typewritten version of each page of the diary written by s dictated by her husband. Each page is initialed by and with word "true" is written under his initials. The original pages are kept by daughter,

Diary page 1 of 28
Copy of ath certificate

Diary page 2 of 28
Employment history
Worked 1943 to 1944
Worked as a carpenter on construction for E. I. DuPont.
Hired to production 1944 (in) 300 Area as a Production Lathe Operator.
Immediate supervisor I
Machining Uranium slugs for the 100 Area reactors
Incident – A hot turning burn on his neck (front of neck)
Dec 1944, 1945 to 1946

Diary page 3 of 28
1946 to 1947 – 224 East
Radiation time limit was set up by as in 1947 in C cell 224 Bldg. floor contaminations cleaning.
I had 18 minutes over exposure the first incident and was kept out of the cell for 6 weeks.
The second incident I was left in the cell 27 minutes – due to a mistake in the time limit by these two men.
This was during a solution transfer from 221 to 224 Bldg. and very high radiation reading.

1948 – 224 West

No incidents during this year of operation

1949, 231 Bldg.
No incidents other than contamination clean u on fingers which was normal periodically.

1950 to 1959, 234-5
Incident – continue to Diary page 4 of 28

Diary page 4 of 28
This building was considered a building to stay clear off by Supervisors and Operators being transferred from other areas

Concentrated Waste – Recovery Operations
I was lowered into a Recovery tank to clean the bottom. I was lowered in head first, I cleaned approximately 2 minutes and a sensation I'll never forget, they pulled me out and immediately closed up the tank and nothing more was said by Nuclear Engineer Supervision. An experience I will never forget.
234-5 Radiation limits set up for hand exposure only although body was subject to this radiation limit - no shielding during years of operations of this building
Supervision – Some just with 8th grade and high school education. No fear of production hazards due to lack of education.

Diary page 5 of 28

as an incident he can't seem to get written down on paper but would like to tell you about a 234-5 vault with high neutron count, which instrument dept. had installed a neutron counter. This instrument could not take the high neutron readings of this area near the Vault. And the instrument was removed. Later we could not get any instrument maintenance men near this area. I worked in this vault several days a week. It was storage for high radio active waste.

uld rather tell someone in his own words this one – hard to explain initials

I eaned plutonium parts 6 to 7 hours a day 5 days and sometime 6 days a week on overtime. This was Part of the machining operation – in manufacturing weapons – continued on Diary page 6 of 28

Diary page 6 of 28

Incident – 234-5 Waste Recovery
- newly hired young nuclear engineers for supervision in waste recovery dept.
Concerning glass lined reactor tank early 1950's (This is incident I will remember as long as I live)
In my mind E. I DuPont and G. E. put production far above safety for their employees. In the 234-5 building their head supervisors and my supervisors put production ahead all else and contamination next and radiation last. They had complete control to work an Operator. Continued on Diary page 7 of 28

Diary page 7 of 28

In earlier 234-5 Bldg. years, Operators kept their own radiation records. The RAD Monitoring Unites (RMU) accepted these records. The Operators records were collected at end of each week – when there was overtime days the Operators would change their records before turning them into RMU in order to get an overtime day. I am guilty of this, they should have fired me. To our ignorance of these radiation hazards we should have had the right supervision to control our radiation limits – And not take the word of the Operator himself – (witnesses available).
Also at this time when Operators had exceeded their RAD limits and could not do their next days work they were advised they may be sent home, without pay. This was Bldg. supervisor ultimatum
(line did not copy)

Diary page 8 of 28
Approximately 1948 had nervous stomach condition. X-Rays possible hidden ulcers. Medical treatment cured this and no stomach problems to date. Treated by Dr.

1957 1958
Effects of weakness affected limbs. Fear of going to Dr., fear of loosing his job.
1959 quite in April – July of 1959, went to work at Lawrence Rad. Lab as maintenance machinist was sick from Aug. 31, 1959 to Sept 22, 1959 and came back to Yakima clinic and hospital.

Diary page 9 of 28
Dr. Norwood – Head of Radiation
Dr. Fucua – Area First Aid Dr. (G.E. Dr.)
Dr. Cooper - G.E. Physical Dr. (G.E. Dr.)
When I sent to see Dr. Norwood in late 1960 in his office – After I came back from Calif. – He said "Don't talk to me about your illness – go to a Dr. here in Richland and tell him your problems".
In 1963 had a complete physical by Dr. Manuel Cooper, understood he was a Dr. for G. E. Company at Hanford. After 30 days he informed me by phone I had rheumatoid arthritis.
In his office he read the X-rays and showed us pictures in his medical book and _____(line did not copy)
(continued on Diary page 10 of 28)

Diary page 10 of 28
Asked me if I'd ever worked near radiation. I then told him I had worked for G.E. and his whole attitude changed toward me and (I) did not see him again. So my wife called 3 days later and he finally talked to her and said ssibly has rheumatoid arthritis.
The following sentence was crossed out. Dr. Manual Cooper left Richland and I have tried to get my records (1974) with no results.

Diary page 11 of 28
I recall several times during 2957 and 2958 wher me home from work on day shift and had to go right to bed. I remember he was in a car pool and I recall someone else driving Vernon's car home on the day he drove to work. I also remember very clear days when he felt so weak that he was helped into our house. During Aug. 31st to Sept. 22, 1959 – He was very weak and complained of his arms and legs
Crossed out sentence
1959 Sept. in California, we went to Tracy to a Dr. and Dr. wanted him to go to the hospital. That's when we decided to go back to Washing for help, as new insurance wouldn't _____(bottom of page did not copy

Diary page 12 of 28
1959 April 9
Incomplete physical. Reason for quitting – fear something was happening to me. I can't explain the weird feeling of weakness.
Supervision – high school educated. Some of them were with education of only eighth grade. No fear of production hazards due to lack of education.
Canned turnings around my desk on mezzanine approx 50 to 75 to 150 grams each, this lasted about 4 month.
upervisor, immediate Supr.

Diary page 13 of 28
234-5 Radiation limits set up for hands although body was exposed to these limit. No shielding these years.

D

1

Employment History -

Worked , 1943 to 1944
As Carpenter on Construction for
E. I. Dupont —
~~Hired~~ Hired in to Production Dec 1944
300 Area as a Production Lathe ~~Operat~~
Immediate Supervision
Machining Uranium Slugs ~~for~~ the
~~300~~ 300 Area reactors -
Incident - a hot turning burn on
his neck (front of neck)

Dec 1944 1945 to 1946

2 of 28

4, 8 B

(2) 1946 to 1947. 24 East

Radiation time sheet was set up by L.

This was in 1947 In C cell 224 Bldg floor Contamination Cleaning.

I had 16 minutes Over exposure the first incident and was kept out of the cell for 6 weeks.

The second incident I was left in the cell 27 minutes – due to a mistake in the time limit by these two men.

This was during a Solution transfer from 221 to 224 Bldg and Very high Radiation reading.

1948 — 224 West

– ~~Painting~~ Supervisor

No Incidents during this year of Operation – 38 28

1949 – 231 Bldg

No Incidents – ~~of any need to mention~~ other than Contamination Clean up on fingers which was normal periodically. 4.8B

1950 to 1959 234 – 5 Bldg.

3) This building was considered a building to stay clear of by by Supervisors and Operators being transfered from other Areas—
(Concentrated waste) Recovery Operations
I was lowered into a Recovery tank to clean the bottom. I was lowered in head first, I cleaned appropimatley 2 min and a sensation Ill never forget, they pulled me out and imediatley closed up the tank and nothing more was said by Nuclear Enginier Supervision An experience Ill never forget—

2.34-5 Radiation limits set up for hand exposure only. Altho body was subject to this radiation limit— no shielding during the years of Operations of this building—

4.3.28

Supervision —
Some just with 8th Grade and High School Education — No fear of Production Hazards due to lack of Education. 4.82

234-5 Bldg —

has an incident he can't seem to get written down on paper but would like to tell you about ~~[illegible]~~ a 234-5 Vault ~~234-5~~ with high nutron count; which insturment dept. had installed a nutron Counter, ~~which failed to~~. This ~~Insturment~~ Could not take the high nutron readings of this Area near the Vault. And the insturment was removed. Later ~~we~~ matntance me Could not get any instarment near this Area. I worked in this Vault. several days a week. It was storage ~~of~~ for high radio active waste

would rather tell someone in his own words this one - Hard to explain — 5 of 28

I (Ken) Cleaned Plutonium parts 6 to 7 hou a day 5 days and sometimes 6 days a week on Overtime. This was part of the machining Operation - In manufacturing of Weapons —

4.8B

Incident - 234-5 waste Recovery - newly hired young nuclear Engineers for Supervisors in waste recovery dept.

Concerning - glass lined reactor tank in early 1950's - (This is an incident I well remember as long as I live).

Note

6 of 28

In my mind E.I. Dupont and G.E. put Production above safety for their employees.

In the 234-5 Building their head Supervisors and my Supervisors put Production ahead all else and Contamination nett and radiation last. They had complete Controll to work an Operator

4.8B

~~in~~ er

In earlier 234-5 Bldg years, Operators kept their own radiation records. The Rad. Monitoring units ~~kept~~ excepted ~~their~~ these records
The Operators records were collected at end of each week -
When there was Overtime days the Operators would change their records before turning them in to . . in Order to get an Overtime day. I am guilty of this, they should have fired me. To ~~my~~ our ignorance of these radiation hazards We should have had the right supervision to control our radiation limits -, And not take the word of the Operator himself - (Witnesses available -)
Also at this time when Operators had exceeded their Rad. limits and 7 of 28 Could not do their next days work they were ~~unadvised~~ advised they may ~~be~~ be sent home, without pay. This was Bldg supervisors ultimatum. -
. . available -. . Heat -

498

~~during the first~~ Approximately 1948 had ~~medical treatment~~ Nervous Stomach condition
X-Ray - possible hidden ulcers
Medical treatment cured this and
no stomach problem to date - Treated
by [redacted]
[redacted] - 1957 1958
Effects of weakness
Effected limbs -
Fear of going to Dr. Fear of loosing
his job.
1959 - Quit in April —— July of
1959 - went to work at Laurence Rod. La
~~Corp~~ as ~~motor~~ maintenance
Machinist [redacted]. [redacted] was
sick from Aug 31st 1959 to Sept 2
1959 and came back to Yakima to clinic
and Hospital -

8 of 28

4.8B

Dr. Norwood - Head of Radiation
Dr. Fucua - Area - First Aid Dr.
Dr. Cooper - G. E. Physical Dr. } Docto

---

when I went to see Dr Norwood in 19[illegible]
in his Office - After I came back from
Calif - He said "Dont ~~[illegible]~~talk to me
About your illness - Go to a Dr here
in Richland and tell him your problems

In 1968 ~~[illegible]~~ had a Complete
Physical by Dr ~~Coop~~ Manuel Cooper
~~[illegible]~~ (facts) ~~understand~~ was a he
Dr for G. E. Company at Hanford. -
~~[illegible]~~ After 30 days ~~[illegible]~~
~~[illegible]~~ He informed me by phone I had
~~rheumatoid~~ Arthritis.
→ In his Office he read the Xrays + 9 of 28
showed us pictures in his Medical book and
1.83

if I'd ever worked near radiation
I then told him, I had worked for G.E.
and his whole attitude changed toward
me, And did not see him again So
my wife called 30 days later and he finally
talked to her and said possibly
has Rheumatoid Arthritis. [illegible]
[illegible]
[illegible]
[illegible].

10 of 28

4.83

I recall several times during 1957 and 1958 when [redacted] came home from work on day shift and had to go right to bed. I remember he was in a car pool and I recall someone else driving [illegible] car (~~our car~~) home on the day he drove ~~was~~ to work ~~[illegible]~~. I also remember very clear ~~several~~ days when he felt so weak that he was helped into our house.

~~[illegible]~~ During Aug 31 st to Sept 22 1959 - He was very weak & complained of his ~~[illegible]~~ arms & legs - ~~[illegible] weight [illegible]~~ ~~[illegible] in California [illegible] [illegible] in weeks [illegible] [illegible]~~ We went to
1959 - Sept In California
Tracy to a Dr. and Dr. wanted him to go to the Hospital. Thats when we decided to go back to washington for help, as New ~~Insurance~~ wouldnt

11-5-78

4-8B

[illegible] — [illegible]

5 - 5146

1959 April 9 —

incomplete Physical

Reason for quiting) fear, something was happing to me
I can't explain the weird feeling of weakness.

Supervision — high school ~~[illegible]~~ educated
Some of them were with educat
of only Eighth grade

No fear of product Hazards ~~[illegible]~~ to lack of education

~~[illegible]~~

canned Turnings around my desk — on mezzanine approx 150 cans 75 to 150 grams each this lasted about 4 months — Bldg sup —
immediate sup —

12/8/78

4.8

234-5 Radiation limits set up for hands altho body was exposed to these limits, ~~also~~, ~~thin pipe glass~~ no ~~lead~~ shielding during these years.

Dec to Dec -

13 of 38

4.83

Release of 's diary and records

We, [redacted] ease to [redacted] copies of our father's diary of radiation incidents at Hanford and copies of his work and related records (a total of 28 pages plus attachment of Employment History and Radiation Incidents and Effects 1942 to 1959) for submission with the Special Exposure Cohort Petition being filed for all classes of workers at Hanford for the years of 1942 to 1961.

6/3/06
Date

6/3/06
Date

4.8 C

Affidavit for Special Exposure Cohort Petition for Hanford

I started working at Hanford January 1948, working at the N. Richland fire department for two years. I worked continuously until retirement except for a couple of incidents. I was off for a 3 week strike, off one week without pay on a criticality incident. This was in the recovery facility in the 234-5 building. No one I knew was allowed in East area for one week, then gradually let some workers back in. People were on clean up around one of the big buildings but not around 234-5 where the bomb was finished.

I worked as an operator. We all worked very hard. We had 20 days of sick leave and five day of personal business, most people were quite careful how they used them. Many never used any of their days.

The plutonium material was received as a liquid. At 234-5 we started drying it in a furnace making it into a powder. worked shoving powder into furnaces; get it dry, this was where took a lot of radiation.

There were different levels of ventilation protection in the building. First level did not have to dress in whites, had leaded glass. Construction used a lot of lead to contain the radiation. Sometimes concrete was poured six feet thick to contain a type of radiation. There were different zones of protection and dress protection required. From the beginning we had different types of monitoring equipment for the different types of radiation. They started with big and clumsy instruments and got smaller and more efficient.

234-5 area was where the plutonium was cast for the first time. I and other operators had gloved hands on the metal itself. We worked with gloves and sometimes masks. At first the metal was poured in a shaped type of mold that was coated with a film. Operators used sand paper to remove the film polishing the plutonium balls. We worked 6 days a week for several months doing this. Later we started to use a lath on a chunk of metal to turn it down to the size desired.

Material was worked in gloved hoods where we could not breathe the contamination; we polished and did different steps of development in the ventilating hoods in a clean room. 234-5 had ventilating hoods in a long line, the material moved from one to the next. Originally we were to rotate working at different stages of the development stations, but found it more efficient to leave an operator to get good at one station.

The plutonium balls were the size of a baseball, half balls at first development, then a whole ball, at the end of the line they were plated with chrome. Set them on 3 fingers, coat it with chrome, then rotate it and coat it again to contain the plutonium. The work goal was to get things done quickly, sometimes we all cut corners. When the criticality happened that part of the job was closed down, we did clean up in other buildings and grounds. This was during the cold war era. We were good operators, they did not want to loose us so they gave us other jobs to keep us on the payroll.

There was no housing available in the area at the beginning of the project. The government built and rented houses in Richland. Houses were based on working in the area, if a worker

quit or got laid off the family had five days to move out. I bought my house for $7000 in 1952. We lived in WA for the fist years, later moved to Richland.

I worked in the tank farm from about 1965, retired in 1987. The tank farms were in 200 East and 200 West. At that time there were about 30 tanks total I think. C Farm in 200 East had 6 tanks buried underground.

Mostly what we did was to go out with crews, change routes for moving liquid from one tank to another with jumpers. Routes had diversion boxes that were contaminated from leakage that happened while moving the liquid or from fitting leakage. The job required developing special made jumpers. These were pipe or flexible metal with 3 claws with a hook on the nozzle that locked the nozzle heads in place. Tightening the claws pulled the clamping lock together. Some liquids leaked down in the box, it was flushed out, we covered the ground around the box with plastic.

Crane crews were 10 to 15 people assigned to put the jumpers in place. A crew had to have a pipe fitter, two riggers (gave signals), a crane operator, a radiation monitoring fitter and 3 or 4 operators, a supervisor, a truck driver. It was an intricate specialized job, sometimes all of the crew received exposure due to leakage in the diversion and tank top boxes.

When I worked in the tank farm, the tanks were single shell steel construction, about 40' high and about 30-40' across. It had cement poured all the way around it and was set into the ground with ten to twelve feet of earth on top of it. One of the tanks in the West area leaked, they found this by drilling wells around the tank, then dropped monitoring instruments into the shafts. Double shell tanks were built in the 70s. The first shell was constructed, then a second shell was built with18" in between, monitoring instruments were put in between the shells. A Texas oil outfit came in to drill well shafts that went down then horizontal under the tanks, air was used to move the instruments into and then back out of the well shafts.

The tank leakage was discovered. The media published this as news. About this time they stopped making plutonium. The tanks contained all different types of chemicals. Management started hiring again to solve the tank problem. The head of the operators union was trying to get more money to get operators to a higher level of education and safety to do the work better. During this time Three Mile Island came into play.

We had procedures to do the work and they were revised a lot. Our work in 234-5 was done hoods. Some of the metals could be very sharp, causing glove and skin punctures. Pee jugs came around when this type of accident occurred. I got punctured when lath turnings penetrated my skin. Another time I had to change filters. I used plastic bags that were sealed and I had to wear masks. Some of the hot stuff got out into the plastic green house. I inhaled it. I received a report that during my working time at Hanford I had 18% disposition of life limit. My body will go to the Washington State University for research at the time of my death to the United States Transuranium Registry.

US Testing and another company after them did the pee testing and fecal testing. Sometimes a new pee can was set on the porch every day, sometimes every month

depending the monitored level of contamination at the current job. Radiation monitoring people were to check the level of exposure during each job. They had some women in radiation monitoring and lab work. Women for the most part were clerks and secretaries. There were no women operators until much later.

Every year workers were given a summery radiation monitoring information report for the year. Mine was sometimes above the limit when working in 234-5. If we were getting too high, we were shifted from a high exposure hood to another less exposure hood to work for a while. Construction people were at 5000 Rad, operators were recommended 3000 Rad maximum yearly exposure. At times we went over limits to get the job done. The exposure rating was supposed to be limited to a certain level per year for a total amount of a lifetime.

We wore a pencil with an electrical charge and a badge that had film in it. These devices were checked and changed monthly or sometimes daily depending on the job exposure.

I started work at the fire department, I was in the hose tower when I got hit in the side of the head with a pulley. I got a swelling in the right ear area that did not go down. I went to the company clinic, the Doctor told me if it didn't go down in a month to come back and see him. Went back he said he had told me to go to the clinic not come back here. During this month I noticed nodules the size of corn kernels starting to grow down my neck under the ear swelling. When I went to the clinic I saw Dr. , he removed all the kernels. The biopsy came back positive for Melanoma cancer. At that time they sent me to Seattle to the Swedish Hospital for further surgery removed an extensive amount tissue from my ear area to under my jaw.

In 2004 I was diagnosed with prostrate cancer. My PSA level was 8. The doctor did a biopsy and treated me with radiation.

6-3-06
Date

STATE OF WASHINGTON

County of Benton. I certify that I know or have satisfactory evidence that signed this instrument and acknowledged it to be his free and voluntary act for the use and purpose mentioned in the instrument.

Signature of Notary Public _____ Date 6/3/06

Title Notary Public My appointment expires 9/25/07

J. A. HAAG
NOTARY PUBLIC
STATE OF WASHINGTON
COMMISSION Expires
SEPT 25, 2007

4.9 Page 3 of 3

Affidavit for Special Exposure Cohort Petition for Hanford

I worked for Rockwell Hanford/Westinghouse from 1983 until 1997, during which time I was clerk and then became Administrator of the Workers Compensation program, I believe in 1987. While Administrator of the program, the Department of Energy sent four cabinets full of old workers compensation claims, which included radiation claims. I was also given a DOE Order/Directive that indicated that I could retain all claims for 80 to 100 years. This DOE Order/Directive was written and/or given to me by who was the overseer of the Workers Compensation within the Department of Energy. I was transferred from the Workers Compensation Program into the PSAP program sometime around 1995, at which time Tim Burdine then became the Workers Compensation Administrator for Westinghouse Hanford.

Date

ANITA R. GAVIRIA NOTARY PUBLIC STATE OF WASHINGTON Commission Expires 08-11-2009

STATE OF WASHINGTON

County of King I certify that I know or have satisfactory evidence that gned this instrument and acknowledged it to be her free and voluntary act for the use and purpose mentioned in the instrument.

Signature of Notary Public Date June 1st, 2006

Title Lead Wrg Coordinator My appointment expires 8-11-2009

4.10

Affidavit for Special Exposure Cohort Petition for Hanford

I worked as disability clerk at Westinghouse, Hanford. I was told by the Worker's Compensation Administrator, , epartment of Energy files of workers that had been involved in radiation etc. exposure were being kept in her office so that if later on in life if any of these workers filed a claim, the record would be available.

I met the new Worker's Compensation Administrator, .. He informed me all of these records had been archived in Seattle, but the Worker's Compensation office had a list of all of these people on the Worker's Compensation clerk's computer so that if they were needed the person's record could be retrieved.

05/23/06
Date

53

STATE OF WASHINGTON
County of Benton
I certify that I know or have satisfactory evidence that ___ signed this instrument and acknowledged it to be (his / her) free and voluntary act for the use and purposes mentioned in the instrument.
Signature of Notary Public Debbie L McGee Dated 5/23/06
Title Notary
My appointment expires 7/17/06

DEBBIE L. MCGEE
COMMISSION EXPIRES
NOTARY PUBLIC
JULY 17, 2006
STATE OF WASHINGTON

4.11

January 17, 2006

About 1:40 p.m. today from Dept of Energy called. She requested my mailing address. When I asked whether the information was ready to mail, she replied that she had found his radiation exposure records and his employment records.

I asked if the internal radiation records had been found, she replied that they would be included in the radiation records.

She never answered if they were ready to mail. She is a most evasive woman.

February 1, 2006

1:04 pm. I left voice message for Explained that I had filed a claim 12/6/05 and had not received any information from her. I asked that she call me at

called me back. She claims she sent the information January 18th, certified mail. I told her I had not received it. She suggested I call our post office, I did. said he had not seen it. If it had been mailed on the 18th, it would still be at the post office, they hold certified mail for 15 days. I called back and left her a voice message explaining this and asking her to call me back.

Called information and got other phone numbers for DOE Richland. I finally reached , supervisor, e said they would Fed Ex it out today.

February 6, 2006

Called and told him I still had not received the package. He said he would have to go to the correspondence office, and he would try to call me back today. It turns out the information has not been sent yet. They scan everything; they wait to see if the scan was readable before sending anything out. Their scanner is down so they haven't sent anything. He was apologetic. He told them to make copies and send the originals to me. If the scan wasn't readable, they could rescan the copies. He will call me back with the Fed X tracking number. He never did.

Finally, I received the package by Fed X on February 8, 2006, tracking number

The original request was via e-mail. Then alled and left a voice message that in the unfortunate event that Mr. was dead, she needed a death certificate. I sent a hard copy request with the death certificate on

December 6, 2005. It took 62 days, almost nine weeks to receive this FIOA request which is supposed to be delivered in 30 days.

was passively aggressive, she would not answer direct questions, she was sugary sweet, but at the same time very uncooperative. It is my belief that she lied when she said the package was sent January 18, 2006. I never received that package.

_____ July 31, 2006
Date

STATE OF OREGON

County of Wasco. I certify that I know or have satisfactory evidence that signed this instrument and acknowledged it to be her free and voluntary act for the use and purpose mentioned in the instrument.

Signature of Notary Public Lacy B Metzentine

Date July 31, 2006

Title Notary Public

My appointment expires July 31, 2009

OFFICIAL SEAL
LACY B METZENTINE
NOTARY PUBLIC-OREGON
COMMISSION NO. 395410
MY COMMISSION EXPIRES JULY 27, 2009

4.19

Affidavit for Special Exposure Cohort Petition 000057

I submitted an e-FOIA (Freedom of Information Act) request for dosimetry records for radiation, internal and external exposures for all years worked at Hanford for my father-in-law on May 26, 2006 via DOE Hanford Site website. I had called FOIA Officer to check on records request and she stated the records were mailed certified on 6/29/06. The records did not arrive by 7/05/06.

My mother-in-law alled on 7/05/06 to find out why the records weren't in the mail. M that there was a mixed up and that the records she had previously said were mailed certified on 6/29/06 were not s records. Ms. explanation of the mix up was something like 'the names were similiar'. Ms aid she couldn't verifiy the email address ; original e-FOIA request. Note: The e-form did not have an information section for email address. So instead of calling or mailing for more needed information (the address and phone number was filled out) she must have threw the e-FOIA request away. So wife requested the records again over the phone direct with on 7/05/06. assured she would put a rush on this request and we should receive the records no later than two weeks.

Happy to report that we did finally receive the records in the second week in July. However, what happened to the original request made on May 26, 2006 on the DOE website? If it is a requirement to verify email address, why isn't there a section on the request for this information? I copied the e-FOIA request for my records and there is a date stamp on bottom 5/26/06. The delay of getting the records within a timely manner was a hardship.

July 31 2006
Date

STATE OF WASHINGTON

County of Benton I certify that I know or have satisfactory evidence that signed this instrument and acknowledged it to be her free and voluntary act for the use and purpose mentioned in the instrument.

CINDY L PENWELL NOTARY PUBLIC STATE OF WASHINGTON COMM. EXPIRES APRIL 29, 2010

Signature of Notary Public Cindy L. Penwell Date 7-31-06

Title Notary Public My appointment expires 4-29-2010

4.1a

Department of Energy
HANFORD SITE

FREEDOM OF INFORMATION ACT

FOIA Requests

FOIA Home

FOIA Request Form

Freedom of Information Act
Electronic FOIA Request Form

To make an Electronic FOIA (E-FOIA) request please provide the follow information:

Name:* * denotes required

Address:*

Phone Number:*

Fax Number:

E-mail:

Description:*

Describe the information that you would like to request as specifically as possible.

I want Dosimetry records for radiation, e
for internal and external exposures for a
years worked at Hanford.

Optional Information

Describe Yourself:

Select a suitable description of yourself and the purpose of the request in order to help to determine status to assess

An individual seeking information for persor not for a commercial use.

Affiliated with a private corporation and am information for use in the company's busine

A representative of the news media and this made part of news gathering and not for a c use.

Affiliated with an educational or noncommer scientific institution, and this request is mac scholarly or scientific purpose and not for cc

escription

Cost Information: $

Maximum cost amout that you are willing to pay
(You will be informed if the estimated costs will exceed this limit.)

Request for waiver of all costs:

Comments: These are records for my personal file.

Make FOIA Request

For questions or comments, please send a message to
Last Updated. 06/3