

2013 Scientific Advisory Committee Meeting
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Registrant Statistics



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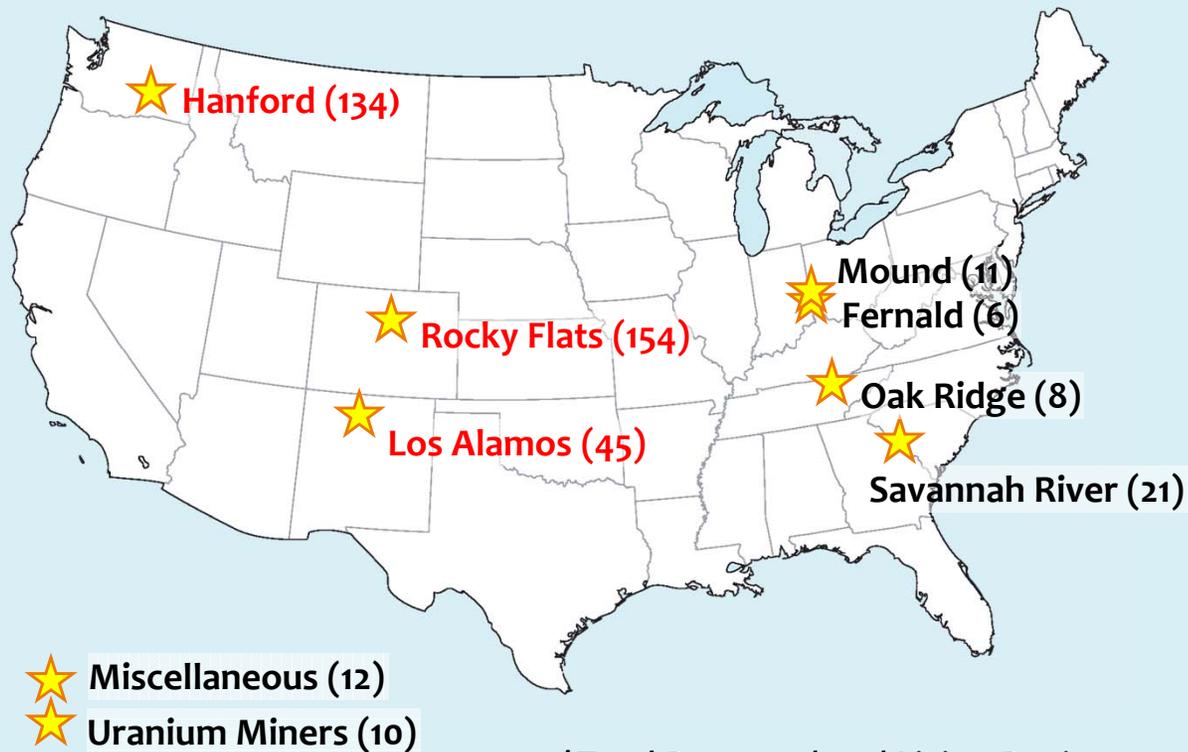
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***“Learning from Plutonium and
Uranium Workers”***

Statistics at a Glance...

Registrants by Primary Work Site



*Total Deceased and Living Registrants



Living: 62
Deceased: 325



Living: 2
Deceased: 12

Average Age



Living: 82 y
Deceased: 69 y

Note: Special studies cases excluded.



Number of Registrants

As of September 1, 2013

Total Living and Deceased Registrants:	413
Living Registrants:	71
Partial-body Donations:	55
Whole-body Donations:	9
Special Studies:	7
Deceased Registrants:	342
Partial-body Donations:	297
Whole-body Donations:	40
Special Studies:	5



How Are These Numbers Changing?

Since the last Annual Meeting...

Living

Net: -7

PB: -4

WB: -3

- 6 Registrant Deaths
- 1 New Registrant

Deceased

Net: +6

PB: +5

WB: +1

Inactive Registrants: +2



Registrant Death #1

Case 0757 – Whole-Body

- Plutonium work for ~1 year
- Uranium work for 3-4 y
- No recorded intake (but there were very few records)
- Only one urinalysis for Pu
 - ✓ 1987: $0.034 \pm .007$ pCi/d ($>$ LOD)
 - ✓ Rough intake estimate: ~60 nCi (2 kBq)



Registrant Death #2

Case 0272 – Partial-Body

- Two Inhalations
 - ✓ 1959: 4 pCi (0.15 Bq), Pu Oxide
 - ✓ 1963: ~3.4 pCi (0.13 Bq) Pu
- Health Physics
 - ✓ 108 urinalyses for plutonium
 - ✓ 42 were above the MDA



Registrant Death #3

Case 0743 – Partial-Body

- Suspected Inhalation
 - ✓ 1971: Positive Pu lung count, no known incident
- Several Wounds in buildings where Pu and/or U were handled
 - ✓ No contamination found when monitored
- Health Physics
 - ✓ Pu: 33 urinalyses (0 >MDA)
 - ✓ U: 33 urinalyses (5 >MDA)



Registrant Death #4

Case 0861 – Partial-Body

- Inhalation/Likely Ingestion
 - ✓ 1964: Plutonium contamination, 20,000 cpm mouth and lips
- Health Physics
 - ✓ Lung count detected 6 nCi Pu
 - ✓ 17 urinalyses for Pu: all background



Registrant Death #5

Case 0691 – Partial-Body

- Multiple Inhalations
 - ✓ 1 chronic inhalation: 14 nCi
 - ✓ 4 acute inhalations totaling: 22.2 nCi
- Health Physics
 - ✓ 101 urinalyses for Pu-238
 - ✓ 58 were above the MDA
- Cause of Death: Mesothelioma

PU-238



New Registrant #6

Case 0803 – Partial-Body

- A pathologist called. He was performing an autopsy on a former nuclear worker. Would we like tissue samples? Initially declined. We cannot accept tissues if permission forms have not been signed!
- Later that day, the deceased's daughter called. She had found what she described as a wallet card. The family (wife, daughter) signed partial-body donation paperwork and the autopsy was accepted.



New Registrant #6

Case 0803 – Partial-Body

- Involved in Deactivation & Decommissioning (D&D) work
- Several Inhalations of Fission Products
 - ✓ Cs-137, Sr-90, beta/gamma
- One inhalation initially thought to be “old” Pu
 - ✓ Nasal smears 30-50 cpm alpha
 - ✓ Decayed to non-detectable the following day
 - ✓ Conclusion: short-lived isotopes.



Inactive Registrants

Two Registrants changed to Inactive.

- Registrant REQUESTED to withdraw from the USTUR:
 - ✓ 0655 (Los Alamos – Partial-body)
- Registrant DECEASED, but Registries not notified:
 - ✓ 0249 (Los Alamos– Whole-body)



Registrant Renewals in FY2013-14

New permission forms must be signed every 5 years.

- 15 Renewed successfully (FY2013)
 - ✓ 3 Whole-body
 - ✓ 12 Partial-body
- 1 Inactive (deceased without notification)
- 27 Renewal Packets will be sent in December 2013
 - ✓ 2 Whole-body
 - ✓ 25 Partial-body



Questions?

