



Increased Controls & Fingerprinting Orders

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(ACMUI)**

Issues with Fingerprinting Orders

- **Cost to licensee**
- **Lack of justification**
- **Grandfathering of Trustworthy & Reliable (T&R) employees**
- **Limited opportunity for ACMUI input**

Cost to Licensee

Fingerprinting costs for one licensee:

- **Local fingerprinting:** <\$50
- **NRC/FBI costs:** \$36
- **Total per employee** <\$90
- **400 employees @ \$90:** \$36,000

Cost to Licensee cont.

Indirect costs (Salary & Benefits):

- **Time away from work - 1 hour** **\$56**
- **400 lab employees @ \$50** **\$20,000**
- **Security (400 @ 0.25 hr)** **\$5000**
- **Health Physics (set-up, training, communications, etc: 0.2 FTE)** **\$15,000**

Total: **\$40,000**

Cost to Licensee cont.

Cost to Licensee cont.

Budget: Outside Services

- **Annual license fees** **\$29,000**
- **Dosimeter service** **\$33,000**
- **Fingerprinting** **\$76,000**

- **If margin = 2.4%, gross needed = \$3.2M**
- **Repeat every 5 years??**

Justification

- **Unfunded mandate**
- **RSO must justify to management**
- **Not based on a vulnerability analysis**
- **No security issues with irradiators**
- **Nuclear Materials Events Database (NMED): 1 “lost” irradiator – 420 Ci; high school license expired 1986; inspection in 2000 failed to locate source (oversight).**

Example

Researcher must be fingerprinted

- **> 400 scientific publications**
- **Grants total \$ millions**
- **Current research:**
 - **collagen induced arthritis**
 - **HLA-B27 gene linked spondyloarthropathies**
 - **experimental autoimmune encephalomyelitis**
 - **allergen induced asthma**
 - **diabetes**
 - **lupus**
 - **coeliac disease**

Grandfathering of T&R Employees

- **Researcher should be grandfathered**
- **Current users passed T&R determination**
- **Fingerprint requirement disqualifies them**
- **All current users should be grandfathered**

ACMUI Input

- **This is first opportunity for ACMUI to address fingerprinting with The Commission**
- **Email to NRC Staff (5/23/07)**
- **Ralph Lieto & I met with NRC Implementation Task Force (7/31/07); briefed ACMUI by conference call 8/15/07**

Conclusions

- **Initial costs significant**
- **Lack of justification for Category 2 sources**
- **T&R employees should be grandfathered**
- **Lack of ACMUI input**

Acronyms

- **ACMUI – Advisory Committee on the Medical Uses of Isotopes**
- **FBI – Federal Bureau of Investigation**
- **NMED – Nuclear Materials Events Database**
- **NRC – Nuclear Regulatory Commission**
- **RSO – Radiation Safety Officer**
- **T&R – Trustworthy and Reliable**