

ANL Radiological Work Permit (RWP)

RWP No. 2007-366-0001

Description of Work (If applicable, attach additional sheets and/or reference procedures, work plans, etc.) Perform leak test (contamination survey) of Co-60 sealed source that has been in long-term storage within concrete cave inside bld. 366. Source was placed there circa 1999. Sealed Source Inventory Database indicates that current source activity has decayed to 77 micro-Ci. Expected dose rate is about 1.2 mrem/hr at 30cm from bare source. Recent survey measured 2.2 mrem/hr at contact with crate, which implies that source inside is unshielded.

Specific

Revision No.: 0

Issue Date: 2/19/2007

Expiration Date: 2/24/2007

RWP Closure or Termination:

Date: _____

By (name) _____

Primary Radiological Concerns and Other Known and Anticipated Hazards (e.g., chemical and physical agents) Potential for radioactive contamination. Potential that source activity has been grossly understated. Wood crate may be only banded together and could collapse if lifted.

ALARA Review

Date Completed _____

Dept./Div. n/a

Laboratory n/a

Workplace Conditions (Document results of pre-work radiation survey either in the space provided or by attaching survey forms or maps, as appropriate)
By (Health Physicist): _____

Work Location

Building 366

Room cave in high bay

General Area Direct α to be determined	Maximum Direct TBD	Range of Removable Contamination Levels stop if > 20 dpm / 100 cm ²
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General Area $\beta\gamma$ to be determined	Maximum TBD	Range of Removable Contamination Levels stop if > 2000 dpm / 100 cm ²
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Maximum (mR/h)@ γ 1 mrem / h@30 cm	Maximum (mrad/h)@ $\beta\gamma$ not applicable	Maximum (mrem/h)@ n not applicable
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ENTRY REQUIREMENTS

Required Rad. Training

RWI RWII GERT Other

Pre-job briefing

Yes No

Dosimetry:

$\beta\gamma$ yes

Neutron n/a

Finger Ring HP tech only

* Alarming Digital SAIC

Rate set 100 mrem/h

Total set 5 mrem

Supplemental

Bioassay

Air Sample

*RWP Dose Tracking/Entry Sheet is recommended

Hold Points: Once cave is open, HP tech shall smear crate exterior. If contamination is less than value stated above, open crate lid and smear interior.

Control Limits (check operative limits and quantify)

- Maximum Individual Dose 10 mrem
- Maximum Collective Dose 15 person-mrem
- Other Operational Control Limits: dose rate < 1rem/h @30cm

Protective Clothing:

Lab coat magenta

Gloves 2 pair

Shoe covers _____

Coveralls _____

Hood _____

Tape all openings yes

n/a

n/a

Respiratory Protection:

Engineering Controls:

Collective Dose Estimate: 15 person-mrem

Special Requirements/Instructions: If crate contains a shielded container, DO NOT remove source. If smears on shield exterior are negative, open shield and smear interior surface if possible. DO NOT smear source directly if it is in a shield.

Approvals to perform work (Print name, sign and date)

Job Supervisor: Patrick Delurgio 2/19/2007

Health Physicist: Stephen W Butala *Stephen W Butala* 2/19/2007

Concurrence (use additional sheet if necessary)

Print names	Concurrence** Signature/ Date
-	_____
-	_____
Paul Niquette	_____
Patrick Delurgio	_____
Ken Wood	_____
Leon Reed	_____

Type of HP Coverage:

continuous

Notify Health Physicists:

Before starting work

Before leaving area

Before removing tools

Other: n/a

**Provide your signature only if you understand the work and requirements, you agree with the primary concerns and special instructions, and your radiological training is current for the required training.