

### UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 25, 2007

**MEMORANDUM TO:** 

Tim Harris, Branch Chief

Source Safety & Security Branch, DMSSA

FROM:

Tomas Herrera #

Source Safety & Security Branch, DMSSA

SUBJECT:

SUMMARY OF MEETING WITH RONAN ENGINEERING, SEPTEMBER 18, 2007

Ronan Engineering representatives requested a meeting with NRC staff, on September 18, 2007, to discuss the leak testing requirements for generally licensed devices in 10 CFR 31.5. Ronan Engineering is a licensee from the State of Kentucky. Ronan Engineering had previously asked the State of Kentucky Radiation Health Branch for their interpretation of the leak test requirements, the state recommend that they discuss the issue with the NRC.

The meeting provided Ronan Engineering with the opportunity to demonstrate the design of their device which uses several sources of smaller activity levels rather than one large source. Their belief was that since their sources were each a maximum of 90 microcuries of activity of cesium-137 then they should be exempted from the leak testing requirements of generally licensed devices. Their device may contain an aggregate of up to ten sources. Ronan Engineering provided NRC staff with handouts to assist with their description of the Radiation Low Level (RLL) gauges. Ronan Engineering also requested an interpretation of a definition for "device" as used in 10 CFR 31.5.

The NRC staff informed the Ronan Engineering representatives that any interpretation of the regulations would need to be made by the NRC General Counsel. The request to remove the leak testing requirements from their RLL gauges must be submitted to the State of Kentucky. The NRC suggested that in their request to Kentucky, Ronan Engineering should prepare a detailed description of their specific situation. Ronan Engineering should discuss their specific situation and provide any material that would assist the regulatory authorities in their decision. The NRC staff also suggested that Ronan Engineering could submit their request as a follow up to their earlier letter to State of Kentucky Radiation Health Branch dated April 18, 2007, requesting clarification of the issue with leak testing. NRC informed the Ronan Engineering representatives that the NRC has a policy of providing technical assistance to Agreement States in the event that the Agreement State may not have the technical experience to provide an interpretation of any specific technical issue or regulatory requirement.

Enclosure:

Ronan Engineering Presentation

Participants:

#### NRC Staff:

John P. Jankovich Catherine Mattsen Patrick Moulding Richard Blanton Ujagar S. Bhachu Tomas Herrera

#### Ronan Engineering:

Craig Caris Drew Cheshire

Distribution: FSME r/f

THarris/DMSSA

JJankovich/DMSSA

MMcKinley/Kentucky

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#### NRC Public Meeting with Ronan Measurement Division

#### September 18, 2007 O-14B10

#### Agenda

Α.	Introductions	/10 min)
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- B. Ronan Presentation (30 min)
- C. Open Discussion (60 min)
  - · Questions and Answers
- D. Wrap up (20 min)

#### NRC Public Meeting with Ronan Measurement Division

#### Meeting Attendance Sheet

Name	Organization	Telephone	E-mail
Tim Harris	NRC	301-415-7218	teh@nrc.gov
John Jankovich	NRC	301-415-7904	jpj2@nrc.gov
Catherine Mattsen	NRC	301-415-6264	crm@nrc.gov
Patrick Moulding	NRC	301-415-2549	pam3@nrc.gov
Tomas Herrera	NRC	301-415-7138	txh1@nrc.gov
RICHARD BLANTON	MRC	30-415-2322	PLBE NEC. BOU
CRAIG CARIS	RDNAN ENG	859-342-8500	OCARIS ORENAMMERSURS ES
DREW CHESHIRE	RONAN ENG.	859-342-8500	RONAN MEASUREHENTS. DIV.
UJAGAK S. BHACH	NRC	301-415-7894	USB @NRC.40V.
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(859) 342-8500 FAX: (859) 342-6426 CRAIG A. CARIS Quality Manager-RSO

#### RONAN

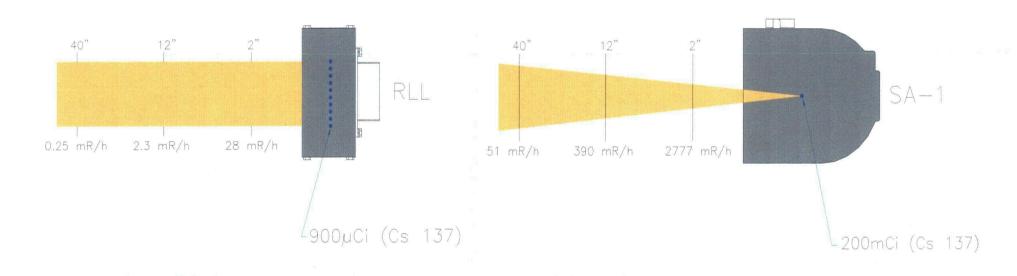
#### RONAN ENGINEERING COMPANY

MEASUREMENTS DIVISION

8050 Production Drive • Florence, Kentucky 41042
Web: ronanmeasure.com E-Mail: ccaris@ronanmeasure.com

Slide Presentation September 18, 2007

## Radiation Field Comparison



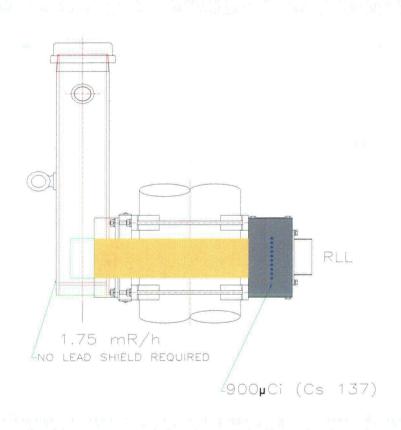
At 12 inches = 9, 818% Reduction in Field Strength

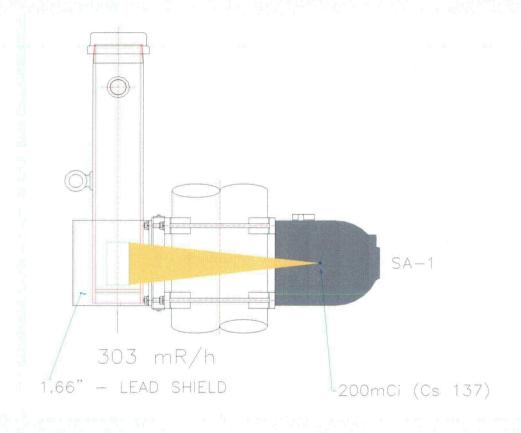
EXCELLENCE IN MONITORING



DENSITY . LEVEL . WEIGHT . RADIATION MONITORING

# Radiation Field Comparison



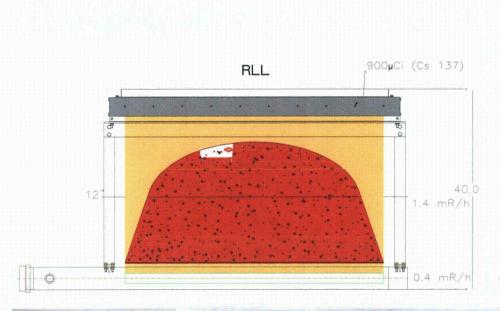


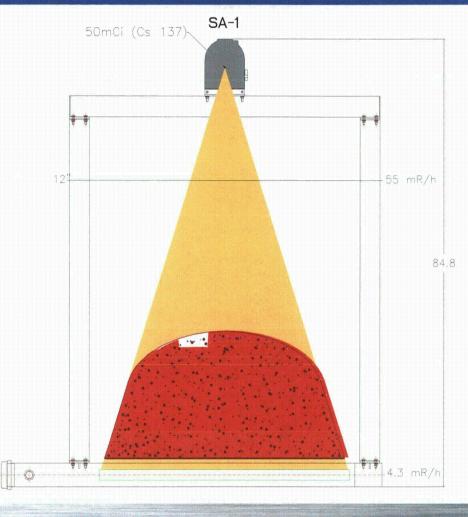
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## Weigh Scale Installation





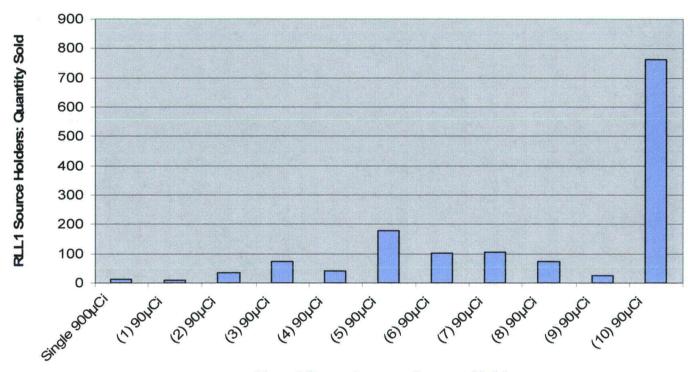
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### **RLL Source Holders Sold**

**RLL1 Sources Sold (1998-2007)** 



No. of Capsules per Source Holder

Total Number of RLL1 Source Holders Sold = 1,423

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### **RLL: Low Level Sources**

Greater understanding and use of scintillation materials such as PVT, NaI and Liquid Scintillation materials, combined with improved algorithms and processors have lead to the ability to utilize significantly lower activity isotopes.

- Maximum of ten 90µCi capsules
- Proven Design: 9 years experience and 1,423 installations without a single incident of leakage
- Safer Working Environment: 9,818% field decrease at 12"
- Less Total Isotope Activity in Marketplace: Gauges utilize on average 200 times less isotope activity
- Lower Isotope Activity: Less expensive disposal charges.
   Therefore, users will be less inclined to store excess/obsolete sources on site





### Reduced Isotopes in the market

The Conference of Radiation Control Program Directors' Source Collection and Threat Reduction Program.

The Conference of Radiation Control Program Directors (CRCPD) and DOE/NNSA have created a program entitled "Source Collection and Threat Reduction" or "SCATR" to collect sources being stored and not used that could - as an aggregate - be used for malicious intent. <a href="DOE recognizes that the availability of disposal of such sources is limited and expensive">DOE recognizes that the availability of disposal of such sources is limited and expensive</a>; and has initiated this rare opportunity for licensees to have financial assistance in properly securing and disposing of these sources through this CRCPD program.



