



July 11, 1988

Ms. Patty Whiston
NRC Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Ms. Whiston:

Per your discussions with Tom Fisher of our company, I have enclosed the most recent quarterly corporate safety system audit for Radiation Sterilizers Westerville facility.

Sincerely,
Radiation Sterilizers, Inc.


Barry Fairand
Vice President, Operations

jm
Enclosures

9006130494 900417
PDR FDIA
GILBERT90-29 PDR

RECEIVED
JUL 14 1988
REGION III
Radiation Sterilizers Incorporated, 305 Enterprise Drive, Westerville, Ohio 43081/Telephone: (614) 888-4077

F/23

RADIATION SAFETY SYSTEM

The following safety system components have been checked for proper operation:

A. Emergency cable in cell:	<u>RH</u>	Date	<u>6/24/88</u>
B. All emergency buttons:	<u>RH</u>	Date	<u>6/24/88</u>
C. Key switches:	<u>RH</u>	Date	<u>6/24/88</u>
D. Pressure mats:	<u>RH</u>	Date	<u>6/24/88</u>
E. Maze photo cell:	<u>RH</u>	Date	<u>6/24/88</u>
F. Cell ion chamber:	<u>RH</u>	Date	<u>6/24/88</u>
G. A.C. power failure:	<u>RH</u>	Date	<u>6/24/88</u>
H. Smoke alarm:	<u>RH</u>	Date	<u>6/24/88</u>
I. Maze ion chamber:	<u>RH</u>	Date	<u>6/24/88</u>
J. Temperature alarm:	<u>RH</u>	Date	<u>6/24/88</u>
K. Water level:	<u>RH</u>	Date	<u>6/24/88</u>
L. All functions and status lights & signals:	<u>RH</u>	Date	<u>6/24/88</u>
M. All audible alarms:	<u>RH</u>	Date	<u>6/24/88</u>
N. Source status printer:	<u>RH</u>	Date	<u>6/24/88</u>
O. Seismic detector:	<u>RH</u>	Date	<u>6/24/88</u>
P. Cell door (entrance):	<u>RH</u>	Date	<u>6/24/88</u>

COMMENTS

Approved By
[Signature]
6/24/88

CONVERSATION RECORD

TIME 8:00 A

DATE 7/15/88

TYPE

☐ VISIT

☐ CONFERENCE

☒ TELEPHONE

☒ INCOMING

☐ OUTGOING

ROUTING

NAME/SYMBOL INT

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

ORGANIZATION (Office, dept., bureau, etc.)

TELEPHONE NO.

Pat Vacca

DMSS HQ

492-0615

SUBJECT

Update on clean up activities at RSI

Director, GA Facility (Leaking CS-137 WEF capsules)

SUMMARY

As of July 15 (A.M.) the team working at RSI facility composed of DOE RSI & Chem-Nuclear personnel have examined 120 of the total 252 WEF capsules used at the facility. Examination techniques include underwater closed circuit T.V. weld and capsule integrity examinations along with ultrasound techniques to determine whether any water had leaked into space between inner and outer capsule.

Of the 120 capsules examined to date, 21 have been labeled "insuspect". The term "insuspect" means the following:

* For clarity, the bottom weld of the capsule is done in the shop prior to source loading. The top weld is done in the hot cell once the source

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

SIGNATURE

DATE

P. J. Wriston

7/15/88

ACTION TAKEN

SIGNATURE

TITLE

DATE

50271-101

U.S. GPO: 1987-181-247/60053

CONVERSATION RECORD

OPTIONAL FORM 271 (12)
DEPARTMENT OF DEFENSE

F/24

CONVERSATION RECORD

TIME

DATE

7/15/88

2

TYPE

☐ VISIT

☐ CONFERENCE

☐ TELEPHONE

☒ INCOMING

☐ OUTGOING

ROUTING

NAME/SYMBOL INT

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

Fat Vacca

ORGANIZATION (Office, dept., bureau, etc.)

H.Q.

TELEPHONE NO.

SUBJECT

Loading has been completed.

SUMMARY

The 20 "suspect" capsules all display what is called "wissing" above the bottom weld. "Wissing" was described as being similar to the blackening of glass when a candle is held below it (soot formation on surface of glass). This is due to chloride corrosion of weld. In addition, there is some discoloration in the first 1/2 inch of metal above the weld due to heat.

The 21 "suspect" capsules are further examined. During examination of the first 12 "suspect" capsules, no water was found between the inner and outer capsule. On July 12, a pinhole leak was discovered. The bottom weld of the 13th suspect capsule examined. However, there is some discrepancy.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

SIGNATURE

DATE

D. J. Winton

7/15/88

ACTION TAKEN

SIGNATURE

TITLE

DATE

CONVERSATION RECORD

TIME

A.M.

DATE

7/15

TYPE

☐ VISIT

☐ CONFERENCE

☒ TELEPHONE

☒ INCOMING

☐ OUTGOING

ROUTING

NAME/SYMBOL

INT

Location of Visit/Conference:

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Pat Vacca

ORGANIZATION (Office, dept., bureau, etc.)

H.Q.

TELEPHONE NO.

SUBJECT

in the position of the weld (top or bottom) since this capsule was loaded into the

SUMMARY

source rack upside down.

Furthermore, DOE H.Q. notified NRC H.Q. yesterday (7/14) that a second leaking "suspect" capsule was found. No details are yet available regarding specifics of this leak.

As a result of the discovery of a second leaker, DOE has suspended use of WEST capsules in their own facilities.

A DOE investigative team at RST's Decatur GA facility determined from examination of record that the WEST capsules used at that facility had undergone 7300 thermal cycles in 2 years (~10 cycles/day). It should be noted here that the WEST capsules at the Westerville, Ohio facility as of 6/14/88 inspection

ACTION REQUIRED

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RJ Wriston

7/15/88

ACTION TAKEN

SIGNATURE

TITLE

DATE

CONVERSATION RECORD

TIME

DATE

7/15/88

TYPE

☐ VISIT

☐ CONFERENCE

☒ TELEPHONE

☒ INCOMING

☐ OUTGOING

ROUTING

NAME/SYMBOL

INT

Location of Visit/Conference:

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Pat Vacca

ORGANIZATION (Office, Dept., Bureau, etc.)

H.Q.

TELEPHONE NO.

SUBJECT

had undergone a total of 620 thermal cycles in approximately 3 years (26 cycles/day).

SUMMARY

P. Vacca indicated that NRC H.Q. may decide to suspend NRC licensed facilities using WEST capsules at a future date, once more information has been obtained. Also, she noted that Deuter, GA & Westville, Ohio facilities are similar in design as far as thermal cycling & sources (all operated by ESI). The Virginia facility using WEST capsules keeps sources submerged and submerges product for irradiation. The Colorado facility has WEST capsules in-air position at all times and lowers capsules into pool only when maintenance is required.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

SIGNATURE

DATE

V. J. Whiston

7/15/88

ACTION TAKEN

SIGNATURE

TITLE

DATE