Mike Creech President/CEO Conam inspection 192-4 Internationale Blvd. Glendale Heights, IL. 60139

SUBJECT: NOTICE OF VIOLATION DATED JULY 16, 1998

Dear Mr. Creech:

This acknowledges receipt of Robert Slack's letter dated August 12, 1998, in response to our letter dated July 16, 1998, transmitting a Notice of Violation.

We have reviewed your corrective actions, which appear to be adequate, and have no further questions at this time. These corrective actions will be examined during a future inspection.

Sincerely.

/s/ J. R. Madera

John R. Madera, Chief Materials Inspection Branch 1

Docket No. 030-31373 License No. 12-16559-01

bcc w/ltr dtd 8/12/98: PUBLIC IE07

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Conam Inspection Inc Inspection & Quality Services

192 Internationale Boulevard Glendale Heights, IL 60139-2094 Telephone + 1 630-681-0008 Facsimile + 1 630-681-0009 http://www.conaminsp.com



August 12, 1998

US Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555

RE: License # 12-16559-01 Reply to Notice of Violation - Docket No. 030-31373

CONAM INSPECTION INC submits the following "Reply to Notice of Violation" in response to your July 16, 1998 letter. We will additionally be requesting that the referenced license be amended to authorize performance of radiographic operations on a temporary job site basis at the Gallipolis, OH location, 240 Upper River Road. This request will be made in compliance with the requirements of 10 CFR Part 34, 34.41(b) and a July 6&7, 1998 inspection at our Gallipolis, OH location.

### REPLY TO NOTICE OF VIOLATION Docket Number 030-31373 License No. 12-16559-01

Severity Level IV Violation-Amersham Model 660A (Serial No. AE 1731) was found to have not been retrofitted with "slide lock bumpers" IAW IN 96-53. The device did not meet the (ANSI) N432-1980 requirements, including the horizontal shock test.

CONAM AGREES!

9808180212



Reason for violation:

This particular camera was initially transferred from one division to another at the approximate time of the retrofit notice and was assigned to a remote site at the time the notification to retrofit was distributed (SEE ME:MO). Apparently the failure to retrofit this camera was an oversite by CONAM. Bumpers were mailed to this site but, as is apparent, were not installed.

Corrective Action:

All divisional offices/satelites have been contacted to assure that the retrofit of every camera in their possession has been attended to. This is to verify that the 52 Amersham 660 cameras in CONAM's inventory all have compliant "bumpers", either through the manufacturing process or by having been successfully retrofit. A safety alert memo has been issued instructing safety personnel of the occurrence of this violation and to highlight this condition during their quarterly camera reviews.

Action to Preclude:

Initially, to avoid as much as possible future violations of the "bumper retrofit" nature, CONAM corporate management will assure compliance to subsequent regulatory dictates through documented quarterly responses verified by divisional personnel responsible for such compliance.

Compliance Achieved:

Round Hanc

Conam is currently in compliance.

Sincerely,

Robert J. Stack Corporate RSO

cc: Regional Administrator, Region in

RJS rs:98097

# INTER

# **MEMO**

#### OFFICE

DATE:

10/29/96

TO:

DISTRIBUTION

FROM:

R. J. SLACK

REF:

Amersham 660 Posilock Retrofit

Please read the attached NRC Information Notice with attachment. You should have previously received the replacement bumpers and made the retrofit. If you need more bumpers contact SENTINEL at 1-800-815-1383 ext. 207.

#### DISTRIBUTION:

M. Creech R. Sweet /S. Fay /J. Ward /N. DiTondo /D. Totman S. Sherman

R. Wilson

✓J. Burke
G. Robbins
D. Tomlinson
✓R. Citarell
C. Norcutt
Unoven Site Rep.
B. Kremiun

J. Bruegger

B. Creech

✓J. Vadnais

D. Bertolotti

✓Gil Martinez

D. Thigpen

J. Fling

L. Galloway

RJS.rs:96-191

Gary Rad. Rep. ✓M. Thigpen

# UNITED STATES NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS WASHINGTON, DC 20555

June 23, 1997

NRC INFORMATION NOTICE 96-53, SUPPLEMENT 1:

RETROFIT TO AMERSHAM 660
POSILOCK RADIOGRAPHY
CAMERA TO CORRECT.
INCONSISTENCY IN 10 CFR PART
34 COMPATIBILITY

#### Addressees

All industrial radiography licensees.

#### Purpose

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice to inform. Ilicensees that the retrofit to the Amersham Model 860 Positock radiography camera referred to within Information Notice (IN) 96-53 must be completed before January 1, 1998, to maintain 10 CFR Part 34 compatibility. It is expected that recipients will review the information for applicability to their licensed activities, and consider actions, as appropriate, to avoid problems. However, suggestions contained in this information notice are not NRC requirements, therefore, no specific action nor written response is required.

#### Description of Circumstances

On October 15, 1996, NRC issued IN 96-53. "Retrofit to Amersham 660 Posilock Radiography Camera to Correct Inconsistency in 10 CFR Part 34 Compatibility," to make licensees aware of a scenario where the Amersham model 660 Posilock radiography camera would not pass the horizontal shock test, as required by Part 34, and of a retrofit to the Amersham Model 660 Posilock radiography camera, to correct that problem. Appendix A contains a copy of IN 96-53.

#### Discussion

To allow licensees sufficient opportunity to request and install the retrofit, units not containing the retrofit will continue to be approved for use through December 31, 1997. Effective January 1, 1998, units not containing the retrofit will no longer be approved for use. Affected compared to make the requirements of 10 CFR Part 34.

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# UNITED STATES NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS WASHINGTON, DC 20555

October 15, 1996

NRC INFORMATION NOTICE 96-53: RETROFIT TO AMERSHAM 660 POSILOCK RADIOGRAPHY CAMERA TO CORRECT INCONSISTENCY IN 10 CFR PART 34 COMPATIBILITY

#### Addressees

All industrial radiography licensees.

#### Purpose

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice to make licensees aware of a scenario where the Amersham model 660 Positiock radiography camera would not pass the horizontal shock test as required by 10 CFR Part 34, and of a retrofit to the Amersham Model 660 Positiock radiography camera to correct that problem. It is expected that recipients will review the information for applicability to their licensed activity. However, suggestions contained in this information notice are not new NRC requirements; therefore, no specific action nor written response is required.

#### Description of Circumstances

Recently, NRC became aware of a scenario where the Amersham Model 660 Posilock radiography camera would not pass the horizontal shock test as required by 10 CFR Part 34.20, "Performance Requirements for Radiography Equipment." Amersham was made aware of the test results, and took action to correct the situation.

#### Discussion

When Amersham tested the camera in accordance with ANSI N432-1980 in 1989, the target for the horizontal shock test was a point between the two bumpers, directly at the slide lock. This point was chosen by Amersham as the most vulnerable impact site. In 1995, tests performed as part of an independent testing contract revealed that there was a more vulnerable impact site. The contractor's test focused aiming at one of the bumpers. The result was damage to the bumper, causing the bumper to become detached, thereby exposing the lock slide to direct impact. Subsequent impacts then broke the lock slide. There appear to be no significant safety issues, since breaking the lock slide would result in an inability to open the shutter. If the source were in the exposed position at the time of impact, the source could still be returned to the shielded and secured position.

Attachment 1 IN 96-53 October 15, 1996 Page 1 of 4

### SENTINEL

Ar ersham Corporation 44 North April Burington, ATA of Soft tell nath 272-2 north tell 800-225-383 tax nath 273-2246

Amersham

Mr. Steven Baggett
Sealed Source Safety Section
Source Containment and Devices Branch
Division of industrial of Medical Nuclear Safety NMSS
U.S. Nuclear Regulatory Commission
Washington, DC 20555

15-1-1885 ) -1 x 3 11 - 2 mg

Dear Mr. Baggett

This letter serves to document the findings and actions we discussed in our conference call on 24 July 1996 concerning the model 660 positock camera.

Joon receipt of the results of the Southwest Research Institute tests that we we received from you an 24 Jun 96, we learned that SwRI report concluded that the 660 Posilok series did not pass the aNSI N432 Section 8.2 Horizontal Shock Test. We then performed an in depth investigation.

These test results greatly concerned us. Not only had we performed the horizontal shock test in 1989 with the product passing without difficulty, but there have not been any indications that there were any problems noted in actual use conditions. ANSI is a performance based standard, and we had not seen any performance based or actual use problems relating to the horizontal shock test.

The results of our internal investigation have shown that there is a more vulnerable impact site on the fevice than we had selected in our testing in 1989. During our testing in 1989, we focused on aiming between the two bumpers directly at the lock slide. In this scenario, the horizontal shock impacts both pumpers. Under these conditions the device clearly passed the horizontal shock test. Until we received he test results from SwRI in Jun 96, we were unaware of a more vulnerable area.

The testing performed by SwRI selected one bumper as the target impact point. Under this condition he single bumper is damaged to a point where it becomes detached, thereby exposing the locking slide of a direct impact. Subsequent impacts then break the slide.

n addition to testing the fragile area identified by SwRI, we tested a range of other areas to assure that he single bumper impact was indeed the most fragile area. No other area was found to be more fragile han the single bumper impact.

Through our evaluation, we have determined that there are no significant safety issues, since breaking he lark slide in this position simply prevents the exposure of the source. The device fails safe.

### ENTER B

Attachment 1 IN 96-53 October 15, 1996 Page 3 of 4

Dear Valued Customer

In accordance with our ISO9001 Certified QA Program, which links with our objective to provide the highest quality products and services as a result of feedback from a range of resources.

SENTINEL has recently received information that when our 600 Position series is subjected to a specific repeated, horizontal shock aimed at one of the bumpers on the rear end plate, the lock slide will eventually break. We were concerned since we had performed this type of testing in accordance with ANSI N432 - 1980. Section 8.2 (Horizontal Shock Test) in 1989 and the product passed without difficulty. In addition, we have not seen any problems in actual use. We promptly initiated a detailed investigation.

The results of our investigation have shown that there is a more vulnerable impact site on the device than we were aware of in our 1989 testing. It is important to note that this is not a safety significant issue as the potential damage to the projector prevents source exposure. The device fails safe. Additionally, this situation has never been reported from the field, and it is unlikely for an impact in field use conditions to result in the type of damage seen in testing.

To preclude any possibility of this situation, we are sending retrofit kits to all owners on record of potentially affected projectors. We've enclosed a sufficient number of kits to retrofit the 660 projectors your company owns. The retrofit process is very simple and is described in the instructions on the opposite side of this card.

We have informed NRC of this situation, and they fully support and agree with our actions.

If you should have any questions, please fee! free to call me at 1(800)815-1383 at extension 200, or Greg Field at extension 207

Thank you in advance for your support.

Bill McDaniel Operations Manager

## RADIATION SAFETY MEMO NUMBER 98002 (7/28/98)

On July 6 & 7, 1998 the Nuclear Regulatory Commission conducted an unannounced audit at CONAM's Gallipolis, OH office. There were various concerns highlighted and one (1) violation noted (See accompanying violation/To Be Posted). This memo is being issued as a result of the completion of the investigation of the concerns and violation.

The concerns involved, both at the office and in the darkrooms, the lack of posting certain documents and/or posting a statement indicating where these documents could be found, the lack of availability of required temporary job site documents such as the current NRC license, dosimeter readings, cal. sheets for ARM's/Dosimeters/survey meters and utilization logs.

The violation involved "utilizing a radiographic camera that had NOT been retrofit with new rubber bumpers" per an NRC directive of 10/96 (Information Notice 96-53). Please review my "REPLY TO NOTICE OF VIOLATION" letter issued to the NRC on 7/29/98, discuss the corrective actions and action to preclude with your personnel and verify and document your compliance.

Remember to place a complete copy of this numbered safety memo with inclosures in a three ring binder along with memo #98001 and POST the notice of violation for the duration of the calendar year.

RJS

Distribution:

✓R. Sweet ✓S. Curl ✓D. Tebo ✓M. Goint ✓S. Fay ✓R. Citarell ✓D. Sarison ✓M. Creech √R. Havens √R. Alexander √M. Zeller √L. Galloway ✓B. Batting ✓M. Thigpen ✓T. Vassios

✓D. Totman ✓S. Sherman ✓A. Morrill