

KAY KAY-RAY[®] INC.

INDUSTRIAL PROCESS CONTROL EQUIPMENT

516 West Campus Drive • Arlington Heights, Illinois 60004 • (312) 259-5600 • TELEX: 221-085 • CABLE: KAYRAY

March 8, 1983

U.S. NUCLEAR REGULATORY COMMISSION
Region III, Office of Inspection and Enforcement
799 Roosevelt Road
Glen Ellyn, IL 60137

References: License No. 12-11184-01
License No. 12-11184-02G
10 CFR 20.405 (a)(1)

Gentlemen:

In accordance with 10 CFR 20.405(a)(1), "Reports of overexposures and excessive levels and concentrations", I wish to report the apparent overexposure of a Kay-Ray employee. The employee, herein referred to as "the subject", is detailed in Appendix A.

On February 9, 1983, I received a report from our dosimetry service which showed that the film badge and TLD ring of the subject had been exposed to unusually high levels of gamma or x-radiation. The subject's body badge had received a dose of 660 millirems and his TLD ring had received 2,490 millirems. Since the subject had received 600 millirems on his October, 1982 film (see my overexposure report dated February 1, 1983) his total whole-body exposure for the fourth quarter of 1982 was 1,260 millirems, 10 millirems over the limit for a calendar quarter.

The December film was actually in the subject's possession from December 10, 1982 to January 24, 1983. The December TLD ring was in his possession from December 10, 1982 to January 21, 1983. As explained in my report of February 1, 1983, the subject was a field service engineer and since he was out of town almost constantly during January he did not have a chance to bring in his dosimeters until late in that month.

I learned from Kay-Ray's Service Manager that the subject had been working on a number of source housings during December and January. He had repaired shutter mechanisms, performed leak tests, rewired shutter position switches, replaced air cylinders on pneumatically operated shutters, and prepared source housings for return to Kay-Ray. It is conceivable that the subject could have actually been exposed to the doses reported if he had not observed basic safety rules while working on source housings.

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Efforts to determine whether or not the subject had been exposed to the reported doses have been hampered by the fact that he is no longer employed by Kay-Ray. The subject's employment was terminated on January 31, 1983. I would like to emphasize that his termination was not related to the overexposure reported on February 1, 1983; the decision to let the subject go was made approximately a month before his release and was related to budget cuts which were, in turn related to the sluggish economy.

I attempted to call the subject at his home in Arlington Heights, IL on three occasions. On each occasion I left word with his mother to have him return my call which he failed to do. He did call Kay-Ray's Vice President, Manufacturing, however, and it was then that we learned he had gotten married and was living in San Antonio, Texas. I called the subject twice at his new employer in San Antonio and the second time, on Friday, February 18, 1983, I was able to speak to him briefly. He indicated that he could not speak at length and promised to call back later that day or the following Monday for sure. I have not heard from him since.

On Tuesday, February 22, 1983, I wrote a letter to the subject in an effort to gain more information. The letter, a copy of which was sent to Mr. Thor Oberg at USNRC, Region III, was sent to the subject via registered mail. The letter was signed for (copy of receipt enclosed) on February 25, 1983. As of this writing I have received no reply.

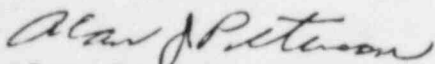
During my brief phone conversation with him, the subject confirmed that he had been working on a number of source housings during December and January and expected his exposure readings to be higher than usual but was surprised to learn that they were as high as reported. He denied working carelessly with the housings but could offer no other explanation for the high readings.

The subject still has in his possession his film badge and ring which were issued to him on January 21 and January 24, 1983. He has not returned these to Kay-Ray as promised when I spoke to him on February 18, 1983.

As indicated above, I have not received any further communications from the subject. I will make a follow-up report if I receive any response to my letter but it is apparent that he is not interested in cooperating.

Yours truly,

KAY-RAY, INC.



Alan J. Peterson
Radiation Safety Officer

cc: Leslie R. Axelrod, V.P. Research & Engr., Kay-Ray
Director, Office of Inspection & Enforcement, USNRC
Exposed Individual (via Registered Mail)

PS Form 3811, Dec. 1980

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| SENDER: Complete items 1, 2, 3, and 4. Add your address in the "RETURN TO" space on reverse. | |
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| <input checked="" type="checkbox"/> Show to whom and date delivered | —\$ |
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| TOTAL \$ | |
| 3. ARTICLE ADDRESSED TO [REDACTED] | |
| 4. TYPE OF SERVICE: <input checked="" type="checkbox"/> REGISTERED <input type="checkbox"/> INSURED <input type="checkbox"/> CERTIFIED <input type="checkbox"/> COD <input type="checkbox"/> EXPRESS MAIL | ARTICLE NUMBER R-057-480-188 |
| (Always obtain signature of addressee or agent) | |
| I have received the article described above. | |
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