

Lucent Technologies
Bell Labs Innovations



November 21, 1996

Microelectronics
Lucent Technologies Inc.
777 N. Blue Parkway
Lee's Summit, MO 64086

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Subject: Reply to a Notice of Violation
Docket No. 030-05097

As you requested in your letter dated November 1, 1996, Lucent Technologies provides the enclosed response to certain alleged violations of NRC rules. Lucent Technologies appreciates the Commission's efforts to work with Lucent Technologies and resolve the questions underlying the alleged violations. By submitting this response, Lucent Technologies does not intend to admit that any of the facts described in the Notice of Violation constitute violations.

Your Notice of Violation seeks the following four general types of information:

- (1) The reason for violation, or the basis for contesting the violation. Because Lucent is satisfied with the outcome proposed in your November 1, 1996 letter Lucent Technologies will not contest the violations alleged in the Notice of Violation in this letter. The facts are as described in our September 6, 1996 letter, and we reiterate them briefly herein.
- (2) The corrective steps taken and the results achieved. Lucent Technologies repeats its responses in its September 6, 1996 letter to you. We briefly reiterate those responses in this letter.
- (3) The corrective steps taken to avoid future violations. Because Lucent Technologies has ceased all manufacturing operations at this location and the facility no longer contains any regulated materials, Lucent Technologies does not believe that any further corrective steps are necessary or possible to ensure future compliance.
- (4) The date full compliance will be achieved. Because Lucent Technologies has ceased all manufacturing operations at this location and the facility no longer contains any regulated material, we believe full compliance already has been assured.

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VIOLATION (As alleged in NRC's letter of November 1, 1996)

10 CFR 30.9(a) requires, in part, that information provided to the Commission by a licensee, or information required by the Commission's regulations to be maintained by the licensee, shall be complete and accurate in all material respects.

Contrary to the above, the licensee did not provide to the Commission information that was complete and accurate in all material respects. Specifically, the NRC Form 314 (Certificate of Disposition) signed by the licensee on December 20, 1993, requesting termination of License No. 24-06015-02, failed to identify the krypton-85 contaminated equipment which remained in AT&T Microelectronics' possession until 1996. The incomplete and inaccurate information was material to the NRC because the NRC granted license termination based on the information provided. (01013).

LUCENT TECHNOLOGIES' RESPONSE

Contaminated Machine Parts in Two 55 Gallon Drums

The former Radiation Safety Officer has advised us that based on the advice of C. Gene Bell, RadTrace Co., the outside consultant that was engaged to assist and oversee the decommissioning activities, he believed that any residual Kr-85 contamination would "gas off" quickly and the machine parts from the decommissioning activity could then be disposed of as ordinary scrap. In a November 1995 telephone conversation with C. Gene Bell of RadTrace Co., Mr. Bell expressed surprise that the Krypton-85 had not "gassed off". The belief that the Kr-85 would "gas off" quickly now appears to have been in error. However, the request for license termination was based on this information. Lucent Technologies would not intentionally mislead or provide erroneous information to the NRC.

Contaminated Storage Canisters

The storage canisters, in the Tracer-Flo machines, had been declared at background levels by the outside consultant at the time of decommissioning in December, 1993. Item 4 in the consultant's service report (Attachment 1) states "Final radiation survey of both units, room and exhaust stack showed all surfaces background." There was no reason to suspect residual radioactivity at that time for these components.

Corrective Action

Contaminated Machine Parts in Two 55 Gallon Drums

The contaminated components were handled properly and responsibly while they were still in our facility. They were stored in an exhausted and restricted area. When we became aware that the components still contained residual radioactivity, prompt action was taken to dispose of them properly. The contaminated machine parts were shipped to Chem-Nuclear's Barnwell Waste Management Facility on December 7, 1995.

All manufacturing activities involving the use of radioactive materials were ceased prior to December, 1993. All Lucent Technologies manufacturing activities were terminated prior to the end of 1995 at this facility. The building and surrounding property are being offered for sale and a potential buyer has been identified. Lucent Technologies has no plans to engage in any manufacturing at this location. Therefore, we are not suggesting any changes to our management practices at this site.

Contaminated Storage Canisters

The storage canisters, which were certified to be at background by RadTrace Co. during the decommissioning activities in 1993 (Attachment 1), were left in the secured Tracer-Flo room. When it was discovered that there may be some residual radioactivity in one of the canisters, an effort was made to include the canister in the shipment to Barnwell, in December 1995. Because of the lead shielding, Chem-Nuclear was unable to accept the canister for burial.

Alternative disposal options were investigated in January, 1996. The canister was cut open to determine the possibility of decontamination locally. Only then was the level of contamination known. Survey readings inside the canister were in the 10-15 mR/hr. range.

On the advice of our Corporate Radiation Safety Officer, Scientific Ecology Group, Inc. (SEG) was contacted in late January, 1996, regarding proper disposal of the storage canister. SEG indicated that they had the capability to handle the radioactively contaminated lead shielded canister. Negotiations were begun between our purchasing organization and SEG, to define an agreement to handle our radioactive waste material. That agreement was finalized in June, 1996 and a purchase order was released on June 19, 1996 to SEG to dispose of the radioactive Tracer-Flo storage canisters and one of the activation chambers which was found to be contaminated during the NRC inspection visit on May 21, 1996.

After several unsuccessful attempts to schedule a pickup, the contaminated storage canisters and activation chamber were picked up by SEG on August 29, 1996.

VIOLATION (As alleged in NRC's letter of November 1, 1996)

10 CFR 30.3 requires, in part, that except for persons exempted, no person shall possess or use byproduct material except as authorized by a specific or general license pursuant to Title 10, Chapter 1, Code of Federal Regulations.

Contrary to the above, between February 4, 1994, and August 1996, AT&T Microelectronics/Lucent Technologies, Inc. possessed krypton-85 in quantities requiring a specific or general license without a valid license and was not exempted from possessing a license. (01023).

LUCENT TECHNOLOGIES' RESPONSE

The completion of the decommissioning of the Tracer-Flo facility in 1993, the termination of all activities utilizing licensed radioactive materials, and the belief of the

Radiation Safety Officer, based on the advice of the outside consultant, that the Kr-85 contamination would "gas off" quickly, prompted him to believe that we no longer had any activity that would require a license. The residual contamination in the three storage canisters was unknown at the time the request for termination was issued.

Corrective action

In conjunction with the phase-out of manufacturing activities at this location, the purchasing manager at this location, contacted an equipment broker in the fall of 1995 to pursue the possible sale of the "decommissioned Tracer-Flo equipment". The equipment broker was not interested in purchasing the equipment, but offered to decommission the facility for a fee. The current Environmental & Safety Coordinator understood that this decommissioning had already been performed in 1993, based on the records regarding the decommissioning activity. As noted above, RadTrace Co. had been engaged to assist and oversee the decommissioning activities.

Our Corporate Radiation Safety Officer was contacted and asked if any further action was necessary prior to the disposal of the Tracer-Flo equipment. He suggested that a final radiation survey to confirm that everything was at background would be appropriate. During this survey, in November 1995, one of the storage canisters was found to have a reading slightly above background. At this time, it was also observed that the two 55 gallon drums of parts from the decommissioning activity were still on site. Survey readings of the top surface of the open drums showed them to be above background. At that time, it was not known that there were additional radioactive contaminated items.

After consulting with our Corporate Radiation Safety Officer, Chem-Nuclear Systems, Inc. was contracted to dispose of the radioactive waste material that had been identified. The two 55 gallon drums of Tracer-Flo machine parts were picked up by Chem-Nuclear on December 7, 1995 for transport to Barnwell for burial. The storage canister was not included because of the lead content.

Survey readings of the storage canister at the inlet/outlet port suggested a low level of contamination. It was decided to cut this open to determine the possibility of decontamination locally. The canister was cut into two sections in January, 1996. Only then was the level of contamination known.

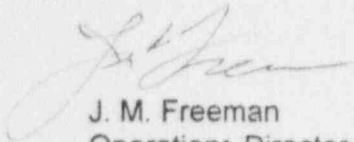
Also as noted above, Scientific Ecology Group, Inc. (SEG) was contacted in late January, 1996, regarding proper disposal of the storage canister, because they have the capability to handle radioactively contaminated lead shielded material. Negotiations were begun between our purchasing organization and SEG, to define an agreement to handle our radioactive waste material. That agreement was finalized in June, 1996 and a purchase order was released on June 19, 1996 to SEG to dispose of the radioactive Tracer-Flo storage canisters and one of the activation chambers determined to be contaminated during the NRC inspection visit on May 21, 1996.

After several unsuccessful attempts to schedule a pickup, the contaminated storage canisters and activation chamber were picked up by SEG on August 29, 1996.

To the best of our knowledge, this facility is now in full compliance with all NRC regulations and no remaining issues exist at this facility related to licensed radioactive material.

I affirm that this response was prepared under my direction and supervision and all information contained herein is accurate and complete, to the best of my knowledge.

Please let me know if you have any further questions.



J. M. Freeman
Operations Director

Attachment:

Copy to:
Regional Administrator
U. S. Nuclear Regulatory Commission
Region III
801 Warrenville Road
Lisle, Illinois 60532-4351

RADTRACE CO.

3821 SOUTH TEAKWOOD STREET

(714) 731-7055

SANTA ANA, CALIFORNIA 92707

SERVICE REPORTCUSTOMER'S REFERENCE NO.DATE: Dec 3, 1993POKCS 22207CompanyAT#1777 N. BLUE PARKWAYLEE'S SUMMIT, MD 64063REPAIRSDEACTIVATION OF TRACER-FLO #1 & #591. BOTH SYSTEMS WERE AIR WASHED VIA
THE EXHAUST BLOWER STACK.2. ALL K185 CONTAMINATED COMPONENTS
VAC PUMPS, COMPRESSORS, VALVES &
METAL PARTS WERE PLACED IN (2)
55 GAL DRUMS FOR DISPOSAL3. CONTAMINATED PUMP OIL WAS OUTGASED
VIA THE EXHAUST STACK.4. FINAL RADIATION SURVEY OF BOTH UNITS, ROOM
AND EXHAUST STACK SHOWED ALL SURFACES BKG. .025 mrad/hr.P/NPriceINSTRUMENT SERVICED TRACER-FLO #1 & #59SERVICED BY C. Gene Bell

RECEIVED BY _____

* SMEAR WIPE TEST SHOWED INSIDE OF BOTH EXHAUST STACKS
TO BE NO GREATER THAN BKG RADIATION OF .025 mrad/hr