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December 2, 1990

U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Attn: Mr. Charles Cain

License No. 03-23185-01

Dear Sir:

This report is submitted in response to the order instructing Tumbleweed X-Ray Company, conducting activities under Byproduct Material License No. 03-23185-01, to obtain the services of an Independent Auditor to follow up the routine, unannounced radiation safety inspection conducted by Ms. L. L. Kasner of your office on September 26 and October 4, 1990.

Mr. Otho Jones, Owner and Radiation Safety Officer of Tumbleweed X-ray Company enlisted the services of the undersigned to comply with that order and conduct an inspection of his program both administratively and with field audits.

On November 17, 1990 I conducted field audits of two field units working in the vicinity of Diamond, Missouri. One unit was being utilized as a "Tie-in/Repair" unit and the other was a "Mainline" unit. I was unable to observe the units conducting radiographic exposures because when I arrived at the jobsite both units were sitting idle waiting for available welds. I continued to conduct the field audit in all other areas with the following results.

"Tie-in/Repair Unit: Radiographer Only

This unit was assigned two (2) exposure devices. A SPEC 2-T s/n 634 containing 65 curies of Iridium 192 s/n 20108 and a SPEC CHEK II s/n 63 containing 14 curies of Iridium 192 s/n 03D04. Radiation levels of the unit were within limits but both exposure devices were laying on the floor of the darkroom. When I asked the Radiographer about this he showed me where the sources would be stored for transporting. He stored the Spec Chek II and assured me the SPEC 2-T would be secured prior to transporting the device.

Utilization logs were being maintained on the unit, an operable and calibrated survey instrument on hand and TLD and dosimeter were being worn. The dosimeter showed a reading of 5mr.

"Mainline" Unit: Radiographer/Assistant Radiographer

This unit was also assigned two (2) exposure devices. A SPEC CHEK II s/n 56 containing 71 curies of Iridium 192 s/n 24103

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and a SPEC 2-T s/n 648 containing approximately 6 curies of Iridium 192 s/n 5093. Radiation levels of the unit were within limits and sources were secured properly.

Utilization logs were being maintained on the unit, an operable survey instrument on hand and TLD and dosimeters were being worn. Dosimeter readings at the time of the inspection were approximately 20mr for each of the personnel. A copy of the leak test results for source s/n 5093 was not on the unit but was later verified as being acceptable during the administrative audit.

It was discussed with the Owner/RSD that an inspection should be conducted while actual radiographic exposures were being made. This was agreed to and additional field audits will be made at the earliest opportunity.

On November 24, 1990 I conducted an administrative audit at the Tumbleweed X-Ray company office in Greenwood, Arkansas. Direct attention was paid to the items listed in the Notice Of Violation letter dated November 8, 1990. At the time of this audit it was apparent that full compliance had not been achieved. Basically the same items of non-compliance existed as found during the inspection by Region IV. The response by the Owner/RSD to my questions about these items and the control forms shown to me that he is in the process of implementing is as follows.

1. Additional administrative personnel has been hired to help in maintaining all documents required by NRC rules and regulations.
2. A control form has been designed for use as a method of insuring that all internal inspections or field personnel is documented and on file.
3. Is in the process of retesting all radiographic personnel who do not have a written test on file.
4. A control form was shown that was being maintained showing the location of each source on a daily basis. I referenced 10 CFR 34.26 and explained the information required on the quarterly inventory to comply with the regulation.
5. A control form has been designed for use as a method of insuring that inspection and maintenance of all radiographic exposure devices are conducted at intervals not to exceed 3 months or prior to the first use thereafter.
6. Control forms have also been designed to insure compliance with requirements pertaining to leak testing of sources and calibration of survey instruments.

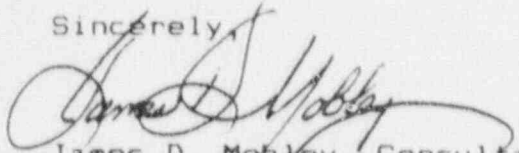
Tumbleweed X-Ray Company

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Implementation of these actions and methods of control is targeted for March 1991.

When asked if response had been made to the Notice of Violation I was told there had been none as yet. I pointed out the required response date and was told the matter would be taken care of at once.

Sincerely,



James D. Mobley, Consultant
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c:
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