



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION I
 831 PARK AVENUE
 KING OF PRUSSIA, PENNSYLVANIA 19406

APR 11 1984

MEMORANDUM FOR: D. P. Allison, Section Chief, D/DEPER
 FROM: M. M. Shanbaky, Section Chief, FRPS, RPB, DETP, RI
 SUBJECT: CLARIFICATION OF 10 CFR 20 APPENDIX A, NOTE I REQUIREMENT.

During a recent inspection of Vermont Yankee Nuclear Power Station, the licensee was using an individual equipped with an air-purifying respirator as the "standby rescue person" during a decontamination operation employing an air-supplied suit. Note i of 10 CFR Appendix A requires a self-contained breathing apparatus for the rescue person whenever air-supplied suits are used. However, clarification of this requirement is needed for this instance.

The licensee was decontaminating scrap steel with iron oxide "sandblasting" equipment in a confinement tent. The "sandblast" operator wore an unlisted air-supplied suit. Contamination levels for the steel ranged up to 25K dpm/60cm. Measurements of airborne radioactivity in the tent made by the licensee at the beginning of the operation showed a maximum of 7.6 times the maximum permissible concentrations for cobalt-60. Lesser amounts of other contaminants were present bringing the total concentration present to less than 8.5 times the summation maximum permissible concentration. The tent was supplied with 4000 CFM of fresh air flow.

The licensee stated that his evaluation of the hazards indicated that an air-purifying respirator provided adequate protection for the "standby rescue person. This position was supported by (1) the atmosphere wasn't immediately hazardous to life; (2) the protection factor afforded by the air-purifying respirator was sufficient for the airborne radioactivity involved; and (3) rescue of the individual in the air-supplied suit could be safely accomplished without respiratory protection due to the low concentration and short times needed to recover an individual.

In view of these circumstances, clarification of the requirement for self-contained breathing apparatus is needed. If rescue of the individual in the air-supplied suit can be safely completed without employing a self-contained breathing apparatus, is it permissible to employ an air-purifying respirator? This item was left as an unresolved item during our recent inspection at Vermont Yankee (Report No. 50-271/84-06) pending clarification of the 10 CFR Appendix A, note i requirement.

M. Shanbaky
 M. Shanbaky, Chief
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cc:
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