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REGULATORY GUIDE

DIRECTORATE OF REGULATORY STANDARDS

REGULATORY GUIDE 5.2

CLASSIFICATION OF UNIRRADIATED PLUTONIUM AND URANIUM SCRAP

A. INTRODUCTION

Part 70 of the Atomic Energy Commission's regulations requires each licensee to maintain material control and accounting procedures for the special nuclear material in his possession under license. A key component of such a system is an accurate, measured material balance. A significant factor in obtaining such a material balance is the determination of the quantity of nuclear material contained in inventories of heterogeneous scrap. Segregation and identification of various types and classes of such scrap can materially assist in the determination of the nuclear material contents by providing information necessary for the selection of appropriate measurement methods and for the correction of measurement results for such things as impurities, poisons, self-absorption, or self-multiplication. This guide describes acceptable standard classifications for both plutonium and uranium "cold" scrap to aid in determining material balances.

B. DISCUSSION

Subcommittee N15.1, of the American National Standards Institute (ANSI) Standards Committee N15,

Methods of Nuclear Materials Control, has developed two standards for the classification of "cold" scrap containing plutonium or uranium. The standard for the classification of uranium scrap was approved by ANSI in 1970. The standard for the classification of plutonium scrap was approved by the ANSI Board of Standards Review on July 25, 1972.

C. REGULATORY POSITION

The classifications for plutonium and uranium "cold" scrap contained in the following ANSI standards are generally acceptable and are sufficiently flexible to be applicable to a wide variety of nuclear facilities:

ANSI N15.1-1970

Classification of Unirradiated Uranium Scrap.¹

ANSI N15.10-1972

Classification of Unirradiated Plutonium Scrap.¹

¹Copies may be obtained from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018.

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