

Jack M. Bell, Byproduct Licensing Branch

CALL TO FRANK G. YOUNG, CARBIDE AND CARBON CHEMICAL COMPANY, SOUTH CHARLESTON, WEST VIRGINIA, MAY 22, 1957 (TELEPHONE NUMBER Riverside 4-6311)

Call was made to Dr. Young to discuss use of AECL stainless steel pencils as outlined in Carbide and Carbon Chemical Company's application, Control Number 2190, (See telephone call of May 1, 1957, from Dr. Young). It was pointed out to Dr. Young that the reply to his letter (which was written to Gay of AECL requesting information on the use of AECL pencils under water) did not supply us with experimental evidence indicating the adequacy of these pencils for use under water. It was pointed out to Dr. Young that although we have evidence indicating that aluminum clad Cobalt may be unsuitable for use under water from a corrosion standpoint, we could license him for the use of AECL aluminum clad slugs contained in stainless steel pencils as long as he was aware of the potential danger of leakage.

Dr. Young was asked to send us a letter indicating his awareness of possible leakage dangers and stating his intentions with regard to monitoring the shielding water. Young stated that he would be glad to do this but would like to know our feelings as to the frequency at which he should monitor the water. Told him we would rather he submit a proposal without definite advice from us. He agreed to do this. Young was questioned regarding the release of the shielding water outside the facility. He stated that the water would not be released but rather constantly recycled through a deionizer. Dr. Young suggested that monitoring of the ion cartridge would probably be most efficient in detecting contamination of the water. Told him this sounded okay. Told him that since the water was not to be released outside the facility that there seemed no requirement for a high monitoring frequency.

Questioned the firmness of the plans regarding the installation of a water deionizer. He stated that they definitely planned to install a deionizer as this will serve to protect all equipment used under the shielding water. Pointed out that this will alleviate, to some degree, corrosion problems associated with the sources.

Young still seemed to be concerned about possible inadequacy of these sources for use underwater. Questioned him as to his intentions with regard to requesting AECL to specially seal his sources. He stated that he was planning to correspond with Gay further in the matter of determining the suitability of the pencils for his use. He did not indicate that he would specifically request special sealing of the sources but stated that it would certainly be nice if AECL would solder or weld the stainless steel pencils. Young referred to AECL as intractable. Told him that AECL had cooperated in the past. Young stated that he would send us a copy of the letter which he will write to Gay in the near future.

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