



UNIVERSIDAD CENTRAL DEL CARIBE

Feb. , 2013

To: JSNRC Region I
2100 Renaissance Blvd Suite 100
King of Prussia, PA 19406

FAX # 610-337-5269

From: Mr. David Rhoe
Radiation Safety Officer
Universidad Central del Caribe

Re: NRC Materials License #: 52-23059-01
Docket #: 030-20225
Control #: 579184

J6

03020225

To whom it may concern.

Please find attached page 18 of the Universidad Central del Caribe Radiation Safety Manual revised in paragraph E. I. e).

The revision of paragraph E. I. e) is shaded.

Please let us know if these revisions are not satisfactory or if any additional information is needed.

Thank you.

REC'D IN LAT 2-08-13

579184
NMSS/RGN1 MATERIALS-002

E. OCCUPATIONAL RADIATION EXPOSURE LIMITS

I. GUIDE FOR EMPLOYEES

- a) There is no particular radiation dose at which injury suddenly occurs and which could, therefore, be defined as "maximum permissible". Radiation sources have been used in medicine and industry for more than 60 years and this experience has been supplemented in the past 20 years by extensive studies on the damaging effects of radiation. As a result of this experience and research, responsible organizations such as the National Council of Radiation Protection and Measurements (NCRP), the Federal Radiation Council (FRC) and the more recent ALARA Program of the NRC have been able to set a series of guides or recommended limits of radiation exposure considered to be acceptable in connection with an occupation.
- b) The UCC operates under the dosage schedule given by the U.S. CFR 10 20.1201. However, the RSC and the RSO will ensure implementation of the ALARA Program in the UCC. Therefore, the guide limits established in U.S.10 CFR 20.1201 have been substituted by the lower Investigational Levels shown in Table 1 of the ALARA Program (see Sec. A). Any radiation received for medical reasons is not be counted as an occupational exposure.
- c) A beta exposure below an average energy of 700 kev will not penetrate the lens of the eye; therefore, the applicable limit for these energies would be that for the skin of the body.
- d) It is well clarified that an occupational emergency dose should not be repeated within one calendar year. The Radiation Safety Officer attempts to control operations so that no individual receives a radiation dose approaching the guide limits given in Table 1, but without imposing undue restrictions on the activities for which the UCC radionuclides program was established.
- e) Any employee, who works with radioisotopes and is pregnant or is considering becoming pregnant, should contact the RSO or the RSC Chairperson 1) to obtain a copy of USNRC Regulatory Guide 8.13: *Instruction Concerning Prenatal Radiation Exposure* and 2) to be advised regarding the employee's and employer's rights and responsibilities. Once an employee's pregnancy is declared in writing (see 8.13 form letter), arrangements must be made 1) to assure that the dose to her fetus during the entire pregnancy period does not exceed 0.5rem(5mSv) and 2) to avoid substantial variation above a uniform monthly exposure rate.
- f) The RSC will keep current and cumulative exposure records on all radiation personnel who require monitoring. Upon a change of employment, the exposure records will be made available to the new