

MINUTES
RSB Subcommittee for the Review of NSC Experiments
and Radiological Control
30 May 1988

The RSB Subcommittee for the review of NSC experiments and radiological control met on 30 May 1988 at 9:00 a.m. in Room 129-A Zachry with the following in attendance: Subcommittee Chairman J. Poston, Subcommittee Members J. McIntyre, R. Kenefick, P. Sandel, G. Schlapper, F. Sicilio, D. Feltz and RSB Chairman F. Jennings.

The minutes of the May 20, 1988 meeting were reviewed with comment that a statement be added that the fission product filter tanks located on the mechanical chase of the NSC should be shielded to reduce radiation levels during operation of the film irradiator experiment. Typo's and a change to the date of the minutes were also noted.

Sandel reported that he met again with K. Crawford and C. Meyer and reviewed the draft training program "Experiment Facilities and Procedures Training Program". The draft is not completed but will be ready for submittal to the subcommittee pending addition to the program of testing requirements and acceptance criteria.

The subcommittee reviewed the report from the Radiological Safety Office of the review of high radiation area control procedures and practices at the NSC for compliance with 10CFR20.203(c)(2). The following comments were made regarding the RSO findings and recommendations:

- I. CONTROL OF RADIATION AREAS AND HIGH RADIATION AREAS ON THE NUCLEAR SCIENCE CENTER LOWER RESEARCH LEVEL (LRL)
 - A. The subcommittee suggested that the solenoid locks for control of personnel to the lower research level are to lock on loss of electrical power (voltage applied to unlock) and are to have NSC supervisor key override.
 - B. Sicilio suggested that the description of the "Radiation Area" sign to alert personnel that radiation areas may exist include the use of warning lights and that the sign apply only when the light is flashing (planned activity or noted conditions). Poston commented that two bulbs be used on the sign to provide redundancy.
 - C. A discussion followed a suggestion by McIntyre that water shutters to beam ports be actuated to close upon entry to a "C-2" controlled area as defined by a fence or cave. It was noted that this may not always be desired and should be considered during RSB review of each new experiment.

II. CONTROL OF HIGH RADIATION AREAS ACCESSIBLE FROM THE UPPER RESEARCH LEVEL (URL) AND OTHER AREAS

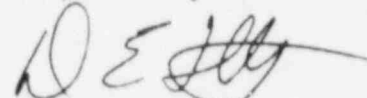
- A. Sandel agreed to verify that "C-2" control is not needed for material handling on the upper research level. He will report to the board his finding regarding the levels of sample activity that would require "C-2" control during handling.
- B. The suggested removal of the "C-2" control of the upper research level was discussed. It was recommended to retain the "C-2" for the URL not necessarily for implementation during irradiation cell operations but for its possible use during special fuel movements or measurements. The subcommittee deferred final comments on the need for "C-2" gates for irradiation cell control until further evaluation. It was noted that during the performance of these experiments there is visual and administrative control of the upper research level. The present procedures may be adequate. Sandel suggested that if gates are to be used, one could consider folding gates to improve set-up requirements and to save space.
- C. It was the opinion of the subcommittee that the implementation of "C-2" control of the cell entry door area was not necessary due to present instrumentation and administrative control procedural requirements for making cell entries.

III. PROCEDURAL REQUIREMENTS FOR CONTROL OF RADIATION AND HIGH RADIATION AREAS

In reference to the recommendations in this section, Kenefick noted that the subcommittee was presently reviewing draft procedures for review and approval of experiments and a training program for individuals involved in experiments conducted at the NSC. Poston stated that the results of these reviews and a summary of subcommittee comments and procedural recommendations regarding the RSO memorandum on control of high radiation area and radiation areas at the NSC would be contained in the draft report to the chairman of the RSB.

The next scheduled meeting of the subcommittee was set for Monday, June 6, 1988 at 1:30 p.m. in Room 129-A Zachry.

Respectfully submitted,



Donald E. Feltz, Director
Nuclear Science Center