Appendix 13 cont'd

PERSONNEL DECONTAMINATION

The radioisotope activities that most of the researchers on campus work with are low enough that whenever personal contamination occurs patience and an informed approach to deal with the problem calmly, slowly but deliberately and effectively is not only preferred but the safest.

Decontamination procedures can begin while waiting for Radiation Safety or transfer to Hudson Health Center and O'Bleness Hospital.

Always try to decontaminate yourself (clothing) first before considering removing any articles of clothing. If you must do so, be sure to leave <u>all</u> contaminated items in the tab. Upon realizing that you are contaminated seek out help from coworkers, so that they can make telephone calls (Radiation Safety, emergency services, etc.), get cleaning supplies, turn on water faucets, handle the survey meter to monitor clean up efforts, etc., so that the spread of contamination can be minimized.

To properly decontaminate personnel, it is necessary to first define the areas of contamination by means of proper monitoring techniques. Special emphasis should be placed on the location of any hot spots on the individual. The mildest methods of cleansing should be attempted first, progressing to more harsh methods when necessary to avoid abrading the skin. Cleansing methods in order of harshness are as follows:

- 1. Flushing with water
- 2. Soap and warm water
- 3. Mild abrasive soap, soft brush and water
- 4. Detergent
- 5. Mixture 50% powdered detergent and 50% cornmeal
- 6. Complexing solution (contains a stable form of the radioisotope, i.e. PBS for P-32)
- 7. Solvent, i.e. scintillation fluid
- 8. Mild organic acid (citric acid, dilute acetic acid)

Chemical treatment is to be used only when absolutely necessary and then only under the direction of Radiation Safety.

After removal of contamination, individuals should take a thorough shower with special attention to washing the hair, hands and fingernails.

In all personnel decontamination procedures, every effort should be made to prevent the spread of contamination.

Remember to always call Radiation Safety as soon as possible whenever personnel contamination is involved.