STANDARD PROTOCOL REQUIREMENTS: SULFUR-35 (S-35)

1. Following work with protocol quantities, hands, arms, clothing, shoes, and work area (including the floor in the vicinity of the work area) will be monitored for contamination using smears. Any areas above 2200 dpm per 100 cm^2 will be immediately decontaminated. A geiger counter with a pancake probe may be used to supplement the smears, but because of its relatively low efficiency for S-35, will not be used as a substitute for smears.

2. Closed containers of S-35 cysteine or methionine will be vented in a chemical fume hood after undergoing significant changes in temperature, e.g., after thawing or incubation.

3. Steps will be taken to minimize contamination during incubation of samples containing S-35 cysteine or methionine. For example:

   a. If possible, cultures containing S-35 cysteine or methionine should be kept in T flasks during incubation.

   b. During incubation, petri dishes can be sealed inside of a desiccator cabinet in accordance with manufacturer's instructions.

   c. Activated-carbon paper such as "□-Safe" paper should be used inside of the incubator or desiccator cabinet to adsorb volatile S-35.

4. The interior of incubators used for cultures containing S-35 cysteine and methionine will be monitored regularly with smears and decontaminated, if necessary, to less than 2200 dpm per 100 cm^2.

5. Up to one month before using protocol quantities of S-35 for the first time, each researcher shall collect a urine specimen to be used as a baseline bioassay. Between 4 and 8 hours after the initial protocol work, each researcher will collect another urine specimen. These urine specimens will be submitted promptly to the Radiation Safety Branch for analysis. Thereafter, protocol users will submit bioassay specimens promptly upon request by the Radiation Safety Branch.

STANDARD PROTOCOL REQUIREMENTS: SULFUR-35 (S-35) Cont.

6. Any spill or personnel contamination resulting from protocol work will be reported to the Radiation Safety Branch as soon as possible.

7. Between 4 and 8 hours following a spill or personnel contamination incident associated with the protocol work, each individual involved will collect a urine specimen and submit it promptly to the Radiation Safety Branch.

8. For the purpose of radioactive waste segregation, S-35 is considered short-lived and should be disposed with other radionuclides which have half-lives of less than 100 days.

9. All radioactive materials in use or storage, including waste, must be secured from unauthorized removal or access when unattended.

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