



Physics Division ESH Bulletin 99-6

A recent event occurred in the Division which emphasizes the need for careful planning when performing tasks where undetected or unexpected hazards may exist. In this event, a beam line component was being replaced when contaminated material was dislodged and fell on the floor undetected. Workers subsequently contaminated the soles of their shoes and spread the contamination over much of the work area floor. Fortunately, the controls in place confined the reportable contamination to the room in which the work was being done.

The event occurred because contamination was present in a part of the beam line which was inaccessible during the survey used to characterize the work area and establish work controls. This particular part of the beam line had not been removed for many years and contaminated material had built up inside the beam line. The work was being performed under a Radiation Work Permit appropriate for working in a Radiation Area and the personnel involved reviewed the job prior to beginning work. However, inadequate emphasis was placed on the fact that the part had not been removed in recent years and, consequently, that contamination levels in inaccessible areas could not be adequately determined from the survey of accessible areas.

Although this event involved radioactive contamination, the same concept should be applied whenever any unexpected conditions arise during a job. Workers should apply the basic concepts of Integrated Safety Management: define the work, analyze the hazards and determine if a formal Job Hazard Evaluation is required per ORNL-SH-P29, develop controls, perform work, provide feedback.

Each worker is responsible for performing their job in a safe manner and should not rely solely on others to determine the hazards present and the level of protection required. Whenever you encounter conditions which suggest the presence of hazards which were not expected from the initial job hazard evaluation, stop and reevaluate the job to determine if additional precautions or protection are warranted.