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STANDARD OPERATING PROCEDURES

Pajarito Plan for Radiation Emergency



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Pajarito Plan for Radiation Emergency

by

H. C. Paxton

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This is a Revision of the Emergency Plan of 4-6-71.

PAJARITO PLAN FOR RADIATION EMERGENCY

by

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I. EXCURSION IN KIVA WITH PERSONNEL PRESENT

An excursion during handling of fissile material at a Kiva* would create an emergency requiring prompt action. Such an event would be indicated as follows.

- 1) Abnormal response of audible counters, shock effects including falling parts of an assembly, or blue glow would be apparent to those involved.
- 2) The radiation alarm in the H-1 office, Rm 120 Bldg 30, would alert personnel outside the Kiva area.

A. Action to be Observed

- 1) The Kiva area will be evacuated as promptly as consistent with necessary rescue operations. Note that a high-level portable radiation detector is located near the main Kiva entrance.
- 2) Persons involved will report to a Health Physics Surveyor (Rm 120 Bldg 30), who will account for everyone known by him or the Crew Chief to have been in the Kiva area. (Entry to the Kiva area is controlled by the Crew Chief during scheduled periods and by the Health Physics Surveyor at other times when fissile material may be handled.)

- 3) The Senior Health Physics Surveyor at the site (or the H-1 Group Leader) will advise the P-5 Group Leader about further action. Such action will be based upon the H-1 document "STANDARD OPERATING PROCEDURES, General and Emergency, Pajarito Site, TA-18", in particular, Part VII, "EMERGENCY MONITORING PROCEDURES".
- 4) The P-Division Leader and the LASL Director will be notified promptly.

II. ACCIDENTAL EXCURSION DURING REMOTE OPERATION.

An accidental excursion during remote operation of a critical assembly is unlikely to create an emergency requiring prompt action. Such an excursion would be indicated by abnormal response of instrumentation in the control room, and by the radiation alarm in the H-1 office, Rm 120 Bldg 30. The monitoring television would give an idea of the extent of damage, if any.

A. Action to be Observed

- 1) The gate to the Kiva area will remain locked until the P-5 Group Leader permits reentry.
- 2) The Senior Health Physics Surveyor at the site will advise the P-5 Group Leader about further action in accordance with his "STANDARD OPERATING PROCEDURES, General and Emergency, Pajarito Site, TA-18". In particular, his advice will be sought before reentry into the Kiva area.

*Except when in Kivas, fissile material of significant quantity is either in containers designed for safe handling or subject to procedures for maintaining safe configurations.

- 3) The P-Division Leader and the LASL Director will be notified promptly.

III. EMERGENCY REQUIRING SITE EVACUATION.

The remote location of each Kiva is such that an excursion at least an order of magnitude greater than the largest that has occurred accidentally would not create a radiation emergency outside the Kiva area. A disaster of external origin, which might require site evacuation, would call into effect the "GENERAL RADIOLOGICAL EMERGENCY PLAN for Los Alamos Scientific Laboratory". This plan is coordinated by the Health Physics Group Office with the help of Health Physics Surveyors at the site. Required communication between the H-1 office, Rm 120 Bldg 30, and other buildings at the site would be with the assistance of the Group P-5 secretary, Rm 109 Bldg 30. A listing of local telephone numbers and intercom stations to be called in case of such an emergency is posted in both offices.