

Operations

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INTRA-LABORATORY CORRESPONDENCE

OAK RIDGE NATIONAL LABORATORY

July 16, 1962

To: C. J. Borkowski
Subject: Instrument Maintenance

I should like to repeat a request which I have made before that we carefully examine the maintenance of the radiation detection instruments in the waste-disposal system. On several occasions recently some of the instruments have not been functioning at times when releases of radioactivity occurred, and consequently we have not obtained the information or warning which we expect from the system. I should like to request that we set up an organization similar to that of Karl West's in the reactors so that one engineer with adequate staff is given formal responsibility for maintenance of these instruments. If Karl could take this responsibility in addition to his duties at the reactors, this would be perfectly agreeable with us and would probably represent an over-all saving from your standpoint since his group might require a smaller addition than a completely new group.

I am attaching a copy of a memorandum from Witkowski which describes an incident where some of the instrumentation was not operating properly.

Original Signed By J. A. Cox

J. A. Cox

JAC:gc

Attachment

cc: M. E. Ramsey
A. F. Rupp
E. J. Witkowski, w/o attachment

This document has been approved for release to the public by:

David R. Hammin 11/17/95
Technical Information Officer Date
ORNL Site

ChemRisk Document No. 2650

INTRA-LABORATORY CORRESPONDENCE

OAK RIDGE NATIONAL LABORATORY

June 12, 1962

To: J. A. Cox

Subject: Release of Activity From the 3039 Stack

During the 24 hr. period ending at 8:00 a.m. on Friday, June 1, we had what appeared to be a very high release of I^{131} from the 3039 stack. We were not able to determine with any accuracy the magnitude nor the time of the release and we were not able to locate the source. The Health Physics area monitors did not show any significant release during the same period.

The activity was picked up on two stack and the off-gas samples. The sample from the recently installed in-stack sampler indicated a release of 24 curies. The sample withdrawn from the fifty foot level through the original stack piping, by the sampling equipment located at ground level, showed a release of six curies. The off-gas sample read 600 mr/hr compared to a normal reading of 5 mr/hr and was too active to be analyzed by normal procedures. Samples taken from the cell ventilation ducts showed no abnormal release of activity through the cell ventilation system. The activity was concentrated on the charcoal portions of the samples, indicating that the release was in the form of a gas and not particulate matter.

The monitoring data covering the period of the probable release is inconclusive because of the unsatisfactory status of our monitoring equipment. The second in-stack sampler has not been installed so that it was not possible to check the results of the one in use at that time. The stack tape monitors that are supposed to be operating at the 50 ft level have not been installed; if they had been in operation they may have given some indication as to the time of the release and may have made it possible to relate the release to a particular operation. The original stack tape monitor was moved to the ground level when the scaffold was removed and has never been reinstalled at the fifty-foot level. It gave no indication of any significant release on that day probably because of the large sampling line losses. The charcoal trap monitor showed no significant release probably for the same reason. The off-gas line direct radiation monitor which usually follows the reading from the charcoal trap, was disconnected in preparation for moving the instruments to the new Waste Control Building.

There are other pieces of monitoring equipment that have not been installed which would not have helped us in evaluating this incident but could be of help in the future. We do not know when the installations will be completed because we cannot compete with other

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projects for craft help from either the E & W or E & C Division. The stack monitoring project that commanded a very high priority two years ago has lost its status completely so that now it cannot even maintain its position on normal craft schedules. At the present time, a total of 107 man days are required to complete the installation of all monitoring equipment. If the progress made in the last few months is any indication of what may be expected in the future, it is doubtful that the work will be completed before the end of this year.

This release, if in fact it were a release, could have been more serious. It serves a useful purpose by again proving the urgent need for better monitoring equipment. The operating group cannot do a satisfactory job by itself without the assistance and cooperation from other people.

E. J. Witkowski
E. J. Witkowski

EJW:hg
cc: JAMurray
DJKnowles