X-125

ACTIVITY HAZARD INCIDENT REPORT

3383

RS-126-53
No. 188

Time of Incident: Approx. 2:50 PM

Supervisor in Charge: S. E. Beall

Date of Incident: 1 October 1953

Health Physics Representative on Duty: L. C. Johnson

Material Involved: Fission Products (Gaseous)

Location: 7500 (Building) Ground (Floor) (Equipment Involved)

Approximate Estimate of Amount of Activity Involved (If gas, indicate length of time): Approx. 30 minutes

Describe Total Area Affected: 7500 Bldg. evacuated due to airborne activity.

Cause of Incident: Pressure from the inner dump tanks was being vented through the stack. The stack monitron, due to high reading, shut off the fan. An incompletely closed valve permitted a filtron being used to sample inlet side of filter box to pump gaseous fission products into the atmosphere at ground level where an east-west wind brought it into the building.

PERSONNEL (give name and badge number of all personnel contaminated)

Name	Badge No.	Location at Time of Incident	Protective Clothing Worn
[redacted]	[redacted]	East of Bldg.	None
WITNESSES:			
[redacted]	[redacted]	East of Bldg.	Complete outfit.

RADIATION READINGS BEFORE DECONTAMINATION

	Reading		Location	Time	Instrument Used
Highest Surface Beta-Gamma		mr/hr	No detectable surface contamination as a result of this incident. The filtron sample read 16 r/hr at 3:10 PM, 70 mr/hr at 9:30 AM on 10-2-53, and 1 mr/hr at 10:00 AM on 10-5-53.		
Highest Surface Alpha		c/m			
Highest Airborne Beta-Gamma		μc/cc			
Highest Airborne Alpha		μc/cc			

How was area decontaminated: Building was evacuated until ventilation system had cleared the air.

Decontamination started _____ Time AM PM _____ Date

Decontamination completed _____ Time AM PM _____ Date

LIST BELOW ALL LOCATIONS WHICH ARE ABOVE TOLERANCE AFTER DECONTAMINATION

	Reading		Location	Instrument
Surface Beta-Gamma		mr/hr or c/m		
Surface Alpha		c/m		
Airborne Beta-Gamma		μc/cc		
orne Alpha		μc/cc		

DISTRIBUTION:
White - Health Physics Division File
Canary - Laboratory Shift Supervisor
Green - Building or Area Operations
Pink - Originating H.P. Survey Engineer

Signed: L C Johnson — Health Physics Representative — Date: 10-7-53

Acknowledged: S E Beall — Supervisor — Date

99 VALIDATION OF ORNL INCIDENTS/UNUSUAL OCCURRENCES(ALC-HMS) DATE RUN 10/09/79 REPORT R098

SERIAL NUMBER	PER ORIE	AREA/FACILITY NUMBER	DATE OCCURRED	TIME OCCURRED	DURATION	WORK AREA (IS PART FURTHER DEFINED)	DESCRIPTION OF INCIDENT	NOTES ** ABCDEFGHIJK
00099		7500	10-01-53	1450	030M	GROUND FLOOR	EQUIP FAILURE VENTED STACK GAS INTO BLD	X X X

RADIATION ENCOUNTERED (A B G NF NI NT) — MATERIALS INVOLVED — SPECIFIC RADIONUCLIDES — (AIR ACTIVITY) PEV MIS — (MAX UCI/CC *) CF 10(-8) — RAD D/G MAX MR/H * — TACTILE CONTAMINATION DATA * (MAX PROBE READING) ALP((C/M)/(D/M)) B-G(C/M) — MAX SMEAR SAMPLE ALP(D/M) B-G(D/M) — DIST. GEN LMT

GASEOUS FP	1	R.M 1(

ID	NAME	(EXP TYPE) EX CL	PE	(EXT EXP INV) RA	CO	CO	WB	TR	HD	FT	HA	NE	LG	AR	(INT EXP) VIA	RE	DR	SK	(SPEC SERV) SM	SM	CT	OB	(MAX CON OF PERS C/M,D/M *) A	B-G	FP	PE	(EXT DOS MAX MR)* PRIMARILY	SKIN	SKIN	SMER	HNDS	(MED OBS) HEAD	TRNK	BODY	WORK DOSE	IR	LR	SK	SK	OT	REST	NO RP
[redacted]					X	X										X																											
[redacted]						X										X																											

** NOTES
A-NO ACTION REQUIRED
B-ENTIRE AREA ZONED
C-AREA PART ZONED
D-ALL WORK STOP
E-NORMAL WORK CONT.
F-AREA NORM C MIN.
G-AREA NORM C MAX.
H-CLEANUP REQUIRED
I-AIR ACTIVITY PRESENT
J-SURFACE CONTAMINATION PRESENT
K-PERSONNEL EXPOSURE LIST

*
H = 100X, M = 1000X, R = MR/HR, WHERE C/M, D/M, UCI/CC ARE SHOWN IN COLUMN HEADINGS

Also see RS 126-53

MAL 11/22/93