CONVERSATION RECORD | TIME | DATE

X TELEPHONE

9/18/13

0 INCOMING
X OUTGOING

NAME OF PERSON(S) CONTACTED OR IN CONTACT	ORGANIZATION (OFFICE, DEPT.ETC.)	TELEPHONE NO.
Gary Bosgraaf, RSO	Mallinckrodt, Inc.	314-713-9813

SUBJECT

Fatality in Cyclotron Target Bunker

SUMMARY

The inspector received a call from Kevin Null regarding a fatality that occurred in a cyclotron target bunker (bunker); therefore, the inspector contacted the licensee's RSO to obtain additional information.

The RSO confirmed the following information:

A cyclotron was shut down for a week to allow short-lived activation products to decay before initiation of planned, non-electrical cyclotron maintenance. After that week, on 9/17/13 at about 6:45am, a licensee employee donned Tyvek coveralls, gloves, inner and outer plastic booties, a dosimeter badge, and an electronic reading dosimeter badge (ERD) in preparation to conduct the routine maintenance. The cyclotron remained shut down prior to the employee's entry into the bunker. In addition, the bunker door had an interlock feature that prevented cyclotron start-up if the door is open, and it was left open for the maintenance activity. Also, beam stops were in place to prevent a cyclotron beam from entering the bunker.

On 9/17/13 at about 7:45am, the employee was found unresponsive in the bunker. The licensee allowed paramedics to try and revive the employee. The paramedics cut the Tyvek coveralls off of the employee and other licensee employees removed the emloyee's gloves and outer booties. A licensee Health Physicist (HP) accompanied the employee during transport via ambulance to a local hospital. The HP used a survey instrument with a scintillation probe to detect counts per minute results of the employee, the employee's inner booties, the paramedics, and the hospital emergency room staff members that tried to help the patient. All of the survey results were indistinguishable from background in a low background area.

After the employee was transported to the hospital, another licensee HP conducted radiation surveys of selected surfaces of the ground/floor path that was used to move the employee from the bunker to the ambulance. In addition, the HP conducted radiation surveys of selected surfaces of the bunker floor, and the survey results were indistinguishable from background in a low background area. Some contamination was found on the employee's Tyvek coveralls that were removed from the employee prior to transport to the hospital.

The employee's ERD read 30 millirem. The bunker radiation exposure rates were typically 20 mR/hr, with some areas that were up to 200 mR/hr. The employee's dosimeter badge was being processed, and results were expected to be available on 9/18/13.

Based on the aforementioned survey results, there was no indication that radioactive material was tracked out of the bunker.

An electrician checked for electrical problems/hazards in the bunker after the event and found no problems or hazards.

The licensee distributed limited information about the event. It was limited to onsite employees and essentially stated that there was a fatality at the facility and that counselors are available for assistance as needed.

ACTION REQUIRED

Briefed Pat Louden, Ann Marie Stone, Prema Chandrathil, and Harral Logaras

Place in ADAMS.

NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE	DATE
Bob Gattone	Robert B. Gattone Jr.	9/18/13

ACTION TAKEN

SIGNATURE	TITLE	DATE