

Caution Bulletin

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Title: Finger Injury while Checking Air Lock Door Switch

Date: April 5, 2006

Identifier: 2006-RL-HNF-0010

Lessons Learned Summary: Established processes must be used for reporting and correcting failed equipment. Making minor repairs spontaneously without proper process controls in place can lead to injuries.

Discussion of Activities: An electrician at PFP was walking past an air-lock when he heard the door alarm and saw someone in the air-lock facing away from him. With the inside door ajar, the electrician held the crash bar with his right hand and reached up to check the alarm plunger with his middle left finger. The door alarm has a plunger switch like a refrigerator or car door that contacts the top of the door. The person inside the air lock, not seeing the electrician holding the door ajar or checking the alarm, pushed the door shut to clear the alarm. The electrician's fingertip was smashed requiring transportation to a local hospital for treatment.

Analysis: During the critique meeting, the latch on door 712 was reported to not always catch, occasionally being exacerbated by the building ventilation system. Its failure to latch caused alarms when Door 139 was opened and air pressure lifted Door 712 off its alarm switch.

Recommendations: While the initiative to fix minor material problems on the spot is commendable, the electrician's failure to prevent the door from closing on his finger was an oversight. This painful injury could have been prevented had both people involved practiced the STAR (Stop, Think, Act, Review) process.

Regardless of how minor a job seems, all potential hazards should be assessed and mitigated to ensure a safe work environment.

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Keywords: crushed finger, STAR, work control

References: Critique Report CRTm-PFP-2005-017, "Electrician receives finger injury while checking air-lock door warning switch"