Fingers caught in Vee Belt

WHAT HAPPENED

• Operator reported to maintenance that the fan was sounding noisy.
• Maintenance leader informed operator that he would be there in 10 minutes.
• Injured person (IP) made decision to assist operator with guard removal due to its size; top half section of guard removed.
• Vee belts were left on in tension.
• Using stillsons on the drive end shaft, operator attempted to turn fan and motor anticlockwise, very little movement.
• Both personnel stopped to discuss the work.
• IP placed right hand on top of belts on drive end pulley, with his left hand fingers in the nip point between the vee belts and drive pulley.
• The belts moved and at this point IP fingers were caught in the pulley leading to loss of the ends of middle and ring finger of left hand; also severe laceration and fracture to little finger.



Nip Point

LEARNING POINTS / ACTIONS TAKEN

Root Cause:

- Body parts in danger areas i.e. line of fire.
- Although fan unit was locked off i.e. to prevent starting of unit, the immobilisation of equipment where other hazards exist was not done i.e. releasing the vee belt tension.
- Scope of work was more than investigative i.e. why the fan was noisy to actual maintenance fault diagnosis.

Learning Points:

- Always position body parts away from line of fire i.e. in this case in a nip point.
- The isolation and immobilisation of equipment process needs to be understood and carried out by all personnel. In addition to the obvious locking off and checking for dead the electrical drive systems, any systems where there is an additional hazard identified, they should be removed and isolated. In this case the vee-belt tension released.

LOCATION:	LIME & SLAG PLANTS	ALERT STATUS:	Normal
ACTIVITY:	MAINTENANCE & HOUSEKEEPING	DATE ISSUED:	20/11/2015 14:58:48
SUB ACTIVITY:	N/A	INCIDENT No:	01423