

SafetyToolboxTalks

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Fire Guard not Guarding Himself

Welding, acetylene torch cutting, plasma cutting and grinding all pose some serious fire hazards, especially when in a hazardous or somewhat hazardous environment. The fire guard rule is in place to make sure that the protective equipment that we have is available and is used when needed. But they shouldn't put themselves in harm way.

While welding and cutting on some sawmill equipment, the welding technician had to put himself in a small area that constricted both his movement and his breathable atmosphere. Not seeing the danger the welding technician continued on with the work. In the meantime, non-breathable fumes had started to build inside the constricted area. Not only that, but just below this was a concealed area of girder where an amount of sawdust, that no one knew about, was lying in wait to ambush some hapless victim. Sawdust when in its finest form can be very dangerous and if not handled correctly will cause a rapidly accelerating fire, nearly like an explosion. The welding technician realized, a bit too late, that the fumes were going to be a problem. When he realized this he tried to remove himself from the area. But he was unable to move. He had become wedged by his own girth in the small area as he lay down to do the welding. Not thinking that all he needed do was raise up from the prone position to allow the "girth" to relax, he struggled mightily to no avail. The fire guard seeing his turmoil rushed to his aid and was all too happy to try to pull the victim from his doom. With great effort they were able to free the victim from the area. He suffered some respiratory distress and was able to recover with the use of some oxygen.

The story doesn't end there. The fire guard noticed a smolder beginning inside or close to the inside of the same area. Being the fire guard he rushed back to the area, and placed himself in the hole in order to see the problem and its location. As he did this he pulled with him the fire extinguisher hose in order to douse the fire with ABC chemical. This chemical can be corrosive and if you read the MSDS sheet, the health hazard assessment, Acute section reads that transient cough, irritation of airways and shortness of breath are symptoms of exposure and the chronic assessment is Pneumoconiosis, or Pneumoconiosis, which is a lung disease like silicosis. Not what you want to get from putting out a fire. The fire guard has his body up in this constricted area and without a thought gives the fire extinguisher handle a good squeeze. The area immediately fills with dry chemical, nearly aerosolized and un-breathable. Of course at this time the fire guard realizes the mistake and he then tries to make his way out of the hole. He isn't encumbered with the same girth as the previous victim, but has a problem of different sorts. The fire extinguisher has become lodged in the area behind him and now he is trapped not being able to move from the area. Not only that but the fire, the one below him on the girder is starting to build and is heating the whole area where he has no become entrapped. The others that are attending the first victim hear his struggle and rush to his aid. He has to be treated a little more than the first victim but with no serious injury he recovers well and continues to work.

The problems in this story aren't made up. They really happened and I was there to see the aftermath. We set about to train our fire guards and welders about the hidden dangers of our work areas and that as fire guards they weren't to put themselves in harm's way in order to get the job done. The area was re-evaluated and re-designed after this so that it no longer posed the same hazard, but we all need to be more aware of our environment whenever we are doing any sort of hot work.