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Washington, DC

Listen & Live / Develop & Follow Smart Safety Procedures

This alert reminds all maritime personnel of the dangers associated with working around or near moving machinery.

A recent marine casualty resulted in a death onboard a Great Lakes ore carrier. Two crewmembers had been working on clearing the vessel's sump pump bilge piping within a cargo conveyor belt tunnel. The piping ran vertically along the bulkhead adjacent to the conveyor belt. Because the clearance between the belt and piping was small, the crew had to step on a large pulley that was part of the system. Simultaneously, a shore-side contractor was working on the conveyor system in another part of the vessel and well removed from the crew working on the bilge piping.

Prior to undertaking the work, the person in charge and all involved working on or near the conveyor had taken some precautions to establish a sequence of audio alarms to use as an alert. It consisted of an initial alarm sounding the need to clear the belt, followed by another alarm notification five minutes later and just prior to starting of the conveyor.

While the crewmembers were working on the piping the initial alarm sounded and they removed their tools and got off of the belt. Shortly thereafter, one person went back on the belt to resume work. His co-worker emphatically told him to get off the belt several times but the he refused, stating that the audible tunnel alarm was not the conveyor belt alarm but rather a watertight door alarm which created a similar sound. The alarm sounded again, the belt started, and the crewmember was entangled in the conveyor system and killed.

In a very recent casualty another man was killed by entanglement with a conveyor system. Although this investigation is in its early stage it appears his arm was caught and severed within components of the conveyor. It is reported that no safety procedures existed pertaining to work on or around the conveyor system and that the deceased did not have a radio or other device to call for help.

Although the investigations are not yet complete and other causal factors may be discovered the Coast Guard **strongly recommends** that Owners/Operators, Classification Society Surveyors, vessel managers and those involved with the inspection of vessels to ensure that:

- regardless of how "its been done before," develop and implement operational, maintenance and repair procedures, including a focus on safety precautions for any element of vessel operations that presents a risk of injury or death;
- every crewmember working in remote spaces be provided with radio or similar communication devices to ensure instant communication with others onboard;
- effective lock out and tag out systems are utilized and involve all persons working on a particular system as responsible parties for the process and clearing;
- verbal acknowledgements from involved personnel of "All Clear" are required prior to the remote starting of any system when work is taking place on or near the system;

- work actually upon or near live machinery is prohibited while other work is being performed on the same machinery; and

For crewmembers, the Coast Guard **strongly recommends**:

- *Review frequently and ensure that safe work practices and procedures are always followed.*

- *If safe work procedures and safe working practices are not available request that they be developed. Study them, raise questions, don't embrace methods or procedures that present risk, even if it has always been done like that before.*

- *Listen to your shipmates when warnings of potential dangers are given.*

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