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To:	All Surveyors/Auditors
Applicable to flag:	All Flags
Remote Monitoring of Confined Spaces Reduces Risks	
Reference:	CONARINA Instructions

Remote Monitoring of Confined Spaces Reduces Risks

According to an International Dry Bulk Terminals Group study, there is a disturbing industry uptick in crewmember deaths in confined spaces. While human error is the root cause generally, there are technologies that ship managers may implement to prevent such tragedies from occurring.

Remote centralized confined-space monitoring systems compliant with OSHA's confined-space entry standards may be set up either on the vessel or onshore to enhance safety and manage any issue quickly, acting as another layer of protection as crew members follow existing confined space entry procedures.

One significant advantage of a remote centralized confined space monitoring system is that it requires fewer workers to manage multiple confined space entries. Headcount required to monitor multiple confined spaces can be reduced eliminating the risk of exposure to a potential incident by up to 75 percent.

The remote centralized confined space monitoring control center continually identifies workers within the space with a sophisticated badge/ID reader. The system operator clears authorized workers to “badge” into the confined space.

All the while, the control room maintains a live visual of the workers via external and internal cameras and a clear line of communication via the push-to-talk communications system to safely

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manage work behavior inside and outside the confined space in real time. The camera system has both color and infrared technology for low-light conditions, while the embedded microphone and speaker allow the control room to communicate with workers inside and outside the confined space. The integrated intercom system reduces the need for two-way radio and improves communication. Therefore, should a crewmember inside the confined space encounter a safety issue, the rescue commander can respond immediately.

The system also monitors the atmosphere for toxic or dangerous gases and delivers appropriate alarms if gas exposure occurs. The gas detection system placed inside the confined space continuously monitors the atmosphere. The atmospheric readings are then displayed in real time in the control room for easy monitoring, and alarms are automatically triggered in the confined space should there be a safety issue.

REFERENCES:

- CONARINA Instructions

- ATTACHMENTS: No

kindest Regards,
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