

Subject:	ESD System Failure		
Alert No	HSEQ/11/11	Date	28/11/2011
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## Details:

Following an incident in our ECIS region it has been highlighted that there is a potential weakness in the type of ESD system used industry wide.

## Investigation Findings / Learning:

Different combinations of ESD Panel and Hi-Pilot manufacturer, coupled with varying lengths of ESD plastic tubing, may result in the 'tripping' of the Hi-pilot failing to activate the ESD panel into shutting down.

Many ESD panels allow air to bleed into the ESD loop through an orifice to keep the loop 'topped up' with pressure, this is designed to prevent small leaks in the tubing and fittings causing a spurious ESD shutdown.

However, some Hi-Pilots have a very small bleed port and a situation can arise where the loop is being topped up at the same rate as it is bleeding off.

In the worst case this would prevent the ESD panel being activated at all when the pilot set pressure is exceeded. Most likely is that the ESD loop will take a considerable time to bleed off, which may allow a possibly minor process upset to escalate unnecessarily.



## Corrective Action:

- Pneumatic quick exhausts should be fitted to pressure pilots to assist in quickly depressurising the ESD loop.
- Each ESD system installation must be function tested in situ prior to use. The time taken for the ESD valve to close after activation from various points should be recorded. This process should be part of the pre flow commissioning of a well test package.