



14 Mar 2012

All Piling Contractors
cc Main Contractors and other interested parties

WORKPLACE SAFETY AND HEALTH CIRCULAR ON SAFE OPERATION OF PILING MACHINES

In Feb 2010, while operating a piling rig to drive a reinforced concrete pile into the ground, the rig's upper structure (including the leader assembly) suddenly slewed 180°. In the process, the pile was pulled out of the ground. The rig operator was subsequently found fatally pinned between the backstay support of the piling rig and the pile.

2. Investigation revealed that in the midst of the pile being driven into the ground, the rig operator left the operator's cabin without engaging the rig's swing brake. The piling rig started to slew on its own due to the slight inclination of the ground. Coupled with the momentum of the hammer strikes and/or the resultant vibrations, the driven pile began to tilt and eventually broke into three segments. It was most likely that when the rig operator realized that the pile was tilting and the rig was slewing, he tried to run back into the operator's cabin to stop the piling operation. However, before he could make it into the cabin, he was caught between the pile and the backstay support of the rig.

3. The swing brake, when engaged, would have prevented the rig from slewing during piling operations. Piling contractors, whether as employers or as principals to sub-contractors undertaking the piling works, have a duty to ensure the safety of the workers performing the work. All piling contractors are advised to alert all piling rig operators, for example, through tool box meetings, assessment of the permit-to-work, and training, that they are not to leave their piling rig during operations.

4. Should you need further information, please contact the Ministry at MOM_OSHD@mom.gov.sg.

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for COMMISSIONER FOR WORKPLACE SAFETY AND HEALTH
MINISTRY OF MANPOWER

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