



**SAFETY ALERT**



**JKKP/DOSH**

### **COLLAPSE OF PILING RIG MACHINERY**



An accident involving piling rig machinery occurred at a construction site recently. The incident occurred when the piling rig operator was lifting a piece of steel plate to be used as a base of the machine for piling works to be carried out at the site.

While the plate was being lifted, the machinery collapsed and the end of the pile leader crushed on a public vehicle, which was passing by the nearby road. This accident resulted in the death of two civilians who were inside the vehicle, and the operator injured his leg.

Based on this accident, among the aspects that need to be addressed by the contractor and operator are:

- i) contractor shall conduct HIRARC to identify all potential hazards which may arise from the work operation that will be carried out, and take the necessary measures to prevent any unwanted incidents;
- ii) contractor shall verify that the condition of the site where the work will be carried out is appropriate and safe, by running tests or with appropriate engineering calculations. For this case, the strength and stability of the soil that will accommodate the load and operating machinery works to be executed must be ensured;
- iii) contractor shall ensure that all components and safety devices on machinery are in perfect condition and functioning properly;
- iv) operator shall operate machinery with proper methods, and comply with work methods or procedures established in the operations manual; and
- v) coordination of work between all contractors involved is very important. For piling work in particular, planning and scheduling of work is critical and must be addressed. Technical information related to machinery and work areas such as the bearing pressure, workload, machinery to be used as well as its working platform, and method statement should be known and made available before the work is carried out.

#### **Further Information:**

- > [Guidelines for Public Safety and Health At Construction Sites \(1st Revision: 2007\)](#)
- > [Guidelines for Hazard Identification, Risk Assessment and Risk Control \(HIRARC\), 2008](#)
- > [Code of Industry Best Practice on Lifting Operations and Lifting Equipment, 2005](#)