



**SAFETY ALERT**



**JKKP/DOSH**

**FAILURE ON WELDING JOINTS OF  
CRAWLER CRANE'S BOOM  
STRUCTURE**



An accident involving a crawler crane had occurred during dredging activity for pile casing installation. The pile casing was installed using vibro-hammer that has been suspended on the main hook block. During the accident occurred, the crane operator has shifted the crane boom position from falling outside the construction area after it's started to fail. No casualty was reported from this accident.

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

- i. Thorough inspection on the crane's boom integrity include of its welded joint and others connection related to crawler crane's structure by conducting a Non-Destructive Testing (NDT).
- ii. Periodic inspection records on crawler crane shall be updated and audited from time to time by qualified person.
- iii. All the repairs work on crawler crane needs to be done by the firm and competent/qualified person.
- iv. Provide a training on design, operation, maintenance and inspection of crawler crane to the operator and competent person.

Reference:

1. Welding Defects, Hubei Key Laboratory for Engineering Structural and Safety Assessment.
2. Factories and Machinery Act 1967