LOLER: A Geo-Environmental Professional's Guide

Geotechnical and geo-environmental site investigation and project work is a physical process. Trial pits are dug, boreholes are sunk, installations are installed; at some point down the line, professionals within the sector are going to be involved in the direct supervision or remote management of plant in the field. Whether this is conducted by subcontracted or in-house staff, any such work which involves mechanically assisted lifting will fall under the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER).

As supervisors and managers, it behooves us to not only be aware of the requirements of LOLER but also to understand the spirit and application of the regulations to ensure that not only do we meet our legal responsibilities and duty of care but that we meet our moral responsibility in ensuring that those who work alongside us (or may otherwise be affected by our acts or omissions) do so in the safest environment possible. This article is not exhaustive, but is intended to provide a solid foundation level understanding (pun intended) of the Regulations and supporting HSE Approved Code of Practice (ACOP L113 2014) and how they apply to our sector.

What is the scope of LOLER?

The Lifting Operations and Lifting Equipment Regulations state that "lifting operation" means an operation concerned with the lifting or lowering of a load. The regulations require that anyone who provides lifting equipment for work, or who is in control of a lifting operation as part of their work, ensures that the equipment is safe and that lifting operations are planned, supervised and safe.

Regulation 3(3) further clarifies that the requirements imposed upon an Employer extend to any person at work who supervises or manages the use of lifting equipment or the way in which the equipment is used.

It should be understood that the Regulations apply to lifting equipment *and* any accessories or attachments which are used for anchoring, fixing or supporting the equipment.

Regulation 9 specifies that a regime of thorough examination and inspection *by a competent person* is in place for any lifting equipment.

The collapse, overturning or failure of any load bearing part of an item of lifting equipment is reportable under RIDDOR.

ESSENTIAL LOLER

Clearly, compliance with the regulations must be demonstrable and communicable. From the supervisor or manager's perspective, this means that the Risk Assessment for the works must identify any hazards associated with lifting and mitigate the risks thereof to an acceptable minimum and that these mitigating measures are in place and communicated clearly to all persons who may be affected.

Any lifting equipment and accessories which come onto your site are legally subject to routine inspection (usually on at least a 6 or 12 monthly basis) and should be clearly marked to enable

identification of each item and, where relevant, their safe working loads. Supervisors should request, in advance of works, certification showing the individual items and the date of last inspection.

Where a competent person is overseeing a self-contained lifting operation (e.g. contract lifts etc.) they should provide a briefing or toolbox talk to site personnel who may be affected by the lift as part of the site briefing.

LOLER in the context of site investigation

Lifting operations are an intrinsic part of site investigation field work. Common examples are:

- Any operation involving a drilling rig, inclusive of those with or without winches (i.e. Cable percussion, Rotary and dynamic sampling rigs, Piling rigs). LOLER inspections certificates should be present for any item with a lifting fitment (e.g. winch hooks, shackles, sinker bars, rod & casing lifting adaptors, chains, SPT hammer assemblies etc.) as well as for the overall lifting platform (i.e. the rig itself)
- Any operation involving a winch or crane
- Excavators which are fitted with dedicated lifting attachments or hardpoints (excavators without specific lifting points should not be used for lifting operations!)
- Delivery vehicles which are equipped with a hi-ab crane, grab lorries, skip trucks and trucks with tail lifts.
- Mobile Elevated Working Platforms (MEWPs) or cherry pickers
- Forklift truck and Tele-handler operations
- Any working at height equipment or confined space access rescue equipment that has a load bearing requirement (e.g. shackles, ropes, winches, eyebolts & anchors, climbing harnesses (not fall arrest equipment))
- "Pulling" winches e.g. Turfers; used to manoeuvre plant & equipment into position (these must NEVER be used to hoist or raise vertically: the design factor of safety for "pulling" equipment is lower than for hoists)

Any plant, equipment or accessories which fall under the above categories MUST be inspected on a regular basis. Statutory thorough examination periods are currently set out in LOLER :

(i) in the case of lifting equipment for lifting persons or an accessory for lifting, at least every 6 months;
(ii) in the case of other lifting equipment, at least every 12 months;

These inspections must be recorded; normally this is presented as a certificate of inspection by a competent third party, although it is possible that a lifting equipment operator will have competent person(s) in house who conduct their thorough inspections.

It is importance that any competent person conducting such an inspection has a working knowledge of the equipment in question, since a crane specialist may not understand the specific loading applications of a drilling rig; a driller may not fully understand the load distribution of an excavator etc. When appointing a competent third party to conduct LOLER inspections, it may not be sufficient to simply engage a "lifting specialist": it is advisable that familiarisation training is provided to ensure that the inspector is fully aware of the operating conditions of the equipment involved.

RESPONSIBILITIES OF SUPERVISORS & PROJECT MANAGERS

Irrespective of whether lifting operations are being carried out by a company's in-house staff or by a subcontractor, it is the legal and moral responsibility of the supervisor to ensure that operations are carried out safely. The supervisor must satisfy themselves that the equipment present on their site is compliant with the LOLER regulations as a *minimum* standard for safe lifting.

IMPORTANCE OF LOLER IN RELATION TO REPORTABLE INCIDENTS

LOLER related incidents are covered under Schedule 2 of the Reporting of Injuries, Disease and Dangerous Occurrences Regulations (RIDDOR) 2013, where part 1, article 1 specifies that "*The collapse, overturning or failure of any load-bearing*

part of any lifting equipment, other than an accessory for lifting." is a reportable incident. The implication of this is that if any plant or equipment subject to LOLER overturns, collapses or otherwise fails on a geotechnical site the incident MUST be reported to the HSE within the time period specified in the regulations.

It is feasible that such an incident would ordinarily be counted as a "near miss" (despite material loss) under the supervisory company's internal QHSE procedures, so it is important that staff who may be supervising plant in the field are aware of the reporting requirements and follow up with the plant operator accordingly to ensure that the incident is reported in the appropriate manner.

Summary

When overseeing a site where lifting operations are to take place, the supervisor should ensure that they have taken the following steps:

- Checked the LOLER certification for the relevant equipment is in date, valid and appropriate:
    - All relevant items of plant are certified and that the certification is appropriate (i.e. a loler certificate for a rotary rig should make reference to the main chain, winch, wire and any fixed lifting tackle, not just the generic machine)
    - All accessories are clearly identifiable from their markings and their safe working load may be established either from these markings or from the corresponding certification

- Checked that operators of lifting plant hold the correct competencies for the safe operation of the equipment (e.g. NVQ land drilling, CPCS)
- Ensure plant and equipment is only used for the lifting operations for which it is designed (e.g. a drilling rig winch must not be used to drag a vehicle)
- Strops, chains and similar accessories should be checked for condition and suitability for use.
- Excavators are only used for lifting operations if they are clearly marked and certified for this purpose.
- Any significant changes to lifting equipment on site, such as shortening of cable percussion rope, must be documented and checked by a competent person (this may well be the driller, but the change should be recorded)
- ALL incidents involving the collapse, failure or overturn of lifting equipment are reportable under RIDDOR; see that this is followed up where required.