SAFE OPERATION OF

SKIP AND HOOK LOADERS

APPROVED CODE OF PRACTICE

Health and Safety at Work (Jersey) Law 1989

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ACoP 12

SAFE VEHICLE

SAFE WORKER

SAFE WORKING PROCEDURES

Safe operation of skip and hook loaders

Approved Code of Practice

Notice of Approval

This Approved Code of Practice, ACoP 12, entitled "Safe operation of skip and hook loaders" has been approved by the States of Jersey Minister for Social Security under Article 10 of the Health and Safety at Work (Jersey) Law, 1989, ("the HSW Law").

This Code provides practical guidance for all persons who have duties under Part 2 of the HSW Law and are involved with skip and hook loader operations.

ACoP 12

This Code of Practice shall come into force on 1 November 2018

Deputy Judy Martin

Minister for Social Security

21 September 2018

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FOREWORD

Every year, in Jersey and the UK, activities involving the movement of skips and containers cause serious and, on occasion, fatal accidents.

By the nature of the working activity skip operators are typically required, on a daily basis, to undertake high risk work, often in unfamiliar and changing environments, without direct supervision. There must therefore be an effective set of controls in place to assess, control and manage skip and hook loader operations to ensure the safety of all involved.

This ACoP is intended to provide practical guidance on how to address the well-recognised dangers associated with skip and hook loaders during skip operations. It also sets out the standards relating to the inspection, examination and maintenance of vehicles and lifting equipment, and the training and assessment of competence of skip operators.

The ACoP is based on, and brings together, authoritative guidance published by the UK Health and Safety Executive (HSE), the Waste Industry Safety and Health Forum (WISH), the UK Driver and Vehicle Standards Agency (DVSA) and representative industry bodies such as the 'Container Handling Equipment Manufacturers' Association' (CHEM UK).

WHO SHOULD READ THIS ACoP?

This ACoP (ACoP 12) is aimed at anyone with responsibility for the safe operation of skip loader and hook loader operations. This includes employers, employees, operators and maintenance staff who operate skip and hook loader vehicles, as well as those in control of workplaces where such operations take place, including construction sites.

It may also be of interest to others such as training providers, designers/ manufacturers and health and safety representatives.

LEGAL STATUS OF AN ACoP

An ACoP has a special legal status. It provides practical guidance on how to comply with the general duties imposed by the Health and Safety at Work (Jersey) Law, 1989 (HSW Law). If the advice is followed, this would be sufficient to demonstrate compliance with the Law in respect of those specific matters to which the ACoP refers.

Alternative methods to those set out in the ACoP may be used in order to comply with the HSW Law, however, if it is proved, during a prosecution for a breach of the Law, that the relevant provisions of the ACoP have not been followed, the defendant will need to show that they have complied with the HSW Law in some other way or a court will find them at fault.

MANAGEMENT OF SKIP AND HOOK LOADER OPERATIONS

Skips and other containers are used widely throughout industry for moving materials. Activities involving the movement of skips and containers result in a number of serious injuries in the Island every year.

The key dangers involved with skip operations include:

- Being struck by vehicles or falling objects
- Failures of lifting equipment
- Striking overhead cables/ obstructions
- Vehicle overturns
- Runaway vehicles

Both the operator and other people in the vicinity, are at risk in the event of something going wrong. There are a few simple measures which can be taken to prevent accidents, including:

- Using suitable equipment for the job to be done
- Ensuring the vehicle, lifting equipment and skips/ containers are maintained in a good condition
- Ensuring skip operations are carried out by trained and competent operators
- Managing skip operations using safe systems of work

In basic terms, the safe operation of skip and hook loaders involves a combination of:

- SAFE VEHICLE
- SAFE WORKER, and
- SAFE WORKING PROCEDURES

This ACoP is divided into these three broad areas.

PART 1
SAFE VEHICLE

Part 1: SAFE VEHICLE

Skip vehicles work in harsh environments and require effective inspection and maintenance.

Both the vehicle and the lifting components must be subject to regular checks to ensure they are in good working order and free from faults or damage that could make them unsafe to use.

Skips and containers must also be inspected regularly to ensure they remain in good repair and are fit for purpose. This is particularly important for sealed skips used for licensed asbestos-containing materials.

MAINTENANCE, INSPECTION AND THOROUGH EXAMINATION

A programme of visual checks, regular inspections, servicing schedules and thorough examination should be established for skip vehicles and associated equipment. This should take into account the manufacturer's instructions and statutory requirements under health and safety legislation, including the 'Chains, Ropes and Lifting Gear (Jersey) Regulations, 1979'.

There must also be a documented system for reporting defects and ensuring remedial work is carried out and signed off by a competent person.

Skip vehicle

Every vehicle should be subject to a formal maintenance programme to ensure it is maintained in a safe condition. A record of all maintenance operations should be kept on a maintenance log.

Daily checks

As a minimum the following should be checked on a daily basis, and before the vehicle is first used, to ensure the vehicle and lifting mechanism is safe to use:

- brakes (foot and hand)
- tyres - correctly inflated, in good condition with sufficient tread
- lights
- steering
- seatbelts
- wheel chocks

- lifting equipment - controls, hooks, chains, hoses etc.
- audible reversing alarm (where fitted)
- vision aids - mirrors, CCTV cameras (where fitted)

A record should be kept of the daily checks. Any defects must be recorded and reported to the relevant Supervisor or Manager.

Planned routine maintenance

Thorough and regular planned servicing and maintenance programmes, in accordance with the manufacturer's recommendations, will help ensure the vehicle operates safely and efficiently and can identify problems before they become an issue.

Such maintenance should only be carried out by competent people who have relevant skills, knowledge and training.

Skip lifting components and containers

Lifting mechanism

All safety critical parts of the skip lifting mechanism, including the lifting hook and arms, hydraulic cylinders and associated pipework and fittings, should be thoroughly examined by a competent person, such as an engineer surveyor, at least once every 12 months.

The thorough examination is designed to detect any deterioration in sufficient time to allow remedial action to be taken.

The lifting components should also be subject to regular maintenance and inspection to ensure they remain in an efficient working order and in good repair.

Lifting chains

The chains used for lifting skips fall within the definition of 'lifting gear' as defined under the 'Chains, Ropes and Lifting Gear (Jersey) Regulations, 1979. They must, therefore, be thoroughly examined by a competent person at least once every 6 months.

Skip bins and containers

Skips exist in a wide variety of sizes and configurations. It is important to ensure that the skip loader and skip bin are compatible to ensure correct interfacing and safe use.

There is a commonly agreed industry standard published by the 'Container Handling Equipment Manufacturers' Association' (CHEM) – TS14 - which sets out the standard specifications for skip containers to permit safe vehicle/ container interfacing.

A written inspection regime for skip bins should be drawn up which identifies the interval between inspections to ensure they remain in good repair and are fit for purpose. This should take into account factors such as the severity of the conditions to which the equipment is exposed, the type of use to which the skip is subject and the risks associated with its use.

Each skip bin should be clearly marked with a unique reference number to enable an auditable record of inspections to be kept.

Skips and containers must be visually inspected before use to ensure they are safe for use. This should include:

- lifting points
- locking points
- tipping bars
- doors and door locks
- restraints
- covers
- general condition

Operators should have the authority, in accordance with the employer's written policy and procedures, to return damaged and unsafe skips and containers to the depot for repair or destruction or, where this would be unsafe, to seek further advice.

Container-skips for hook loader vehicles

All container-skips used with hook loaders must be specifically designed for use with hook loader vehicles.

Lifting hooks and container-skip hook bars must be built to the relevant CHEM guidelines to ensure there is no opportunity for the lifting hook to inadvertently connect to any part of the container-skip framework.

Accessories used for securing a load

Any accessories used for securing the load must be compatible with it, taking into account any attachment points on the load, the environmental conditions in which the accessories will be used and their configuration of use.

Safe working load

The safe working load(s) for each configuration of the lifting arms must be prominently affixed to the skip loader.

PART 2
SAFE WORKER

Part 2: SAFE WORKER

TRAINING AND ASSESSMENT OF COMPETENCE OF OPERATORS

Competence

The operator carrying out skip movements plays a vital part in ensuring the safety, not just of themselves but also other people in the vicinity who may be at risk of serious and potentially fatal injury in the event of something going wrong. It is, therefore, essential that anybody who operates a skip vehicle is competent to do so.

Competence is generally described as the combination of training, skills, experience and knowledge that a person has, and their ability to apply them to a task safely.

Competence is not, however, an 'absolute' and for any given job there is progression towards greater competence, which develops incrementally throughout the operator's career.

As well as initial training, which will provide a general level of ability to operate the equipment, the complexity of the environment, the difficulty of the task and the experience of the operator will all be key factors in determining whether somebody is competent to do a particular job.

Training

Every person operating a skip or hook loader must be properly trained, assessed and authorised as competent to do so.

Employers must satisfy themselves that operator training is only carried out by instructors who have themselves undergone appropriate training in instructional techniques and skills' assessment. Instructors also need sufficient industrial experience to enable them to put their instruction in context and have an adequate knowledge of the working environment in which the operators will be expected to operate.

There are a number of nationally recognised training schemes for skip and hook loader operators, including the 'National Plant Operators' Registration Scheme' (NPORS), which provide a verified set of competence standards for the industry. Whilst employers may devise and operate their own in-house training scheme, they must be able to demonstrate that this meets the equivalent standard to that provided by the more formal, independent training courses available.

As basic training is typically carried out in a controlled environment, this training should always be consolidated through structured, on-the-job training (familiarisation training) to enable the acquisition of the appropriate knowledge and accumulation of relevant operational experience (i.e. competence), which will develop incrementally throughout an operator's career.

Training should extend to address not just the technical knowledge and ability required to operate the skip or hook loader, but also the wider safety critical matters such as the assessment of hazards and risks associated with the different environments, e.g. assessment of the ground conditions, type of skip movement, operating in restricted areas, etc.

Basic training

Basic training for new operatives must be carried out off-the-job. This may be at a suitable training centre or on employer's premises. If it is carried out on an employer's premises the training must be wholly concerned with training and not form part of any normal commercial operations.

Training should be largely practical in nature and of sufficient length to enable trainees to acquire the basic skills and knowledge required for safe operation of the skip/ hook loader. It should follow a structured, documented training programme which enables the trainee to progressively develop skills in an appropriate sequence.

The instructor should continuously assess a trainee's progress to ensure the required standards are achieved at each stage of basic training.

Specific job training

Specific job training may follow basic training or be combined with it. It is intended to ensure the operator has sufficient knowledge and understanding to be able to operate the lift/ hook loader in conditions they are likely to face at work, and in accordance with their employer's policies and procedures.

This should include matters such as routine inspections of the vehicle and lifting mechanism, instruction on site rules, assessment of ground conditions and weights of loads, safe systems of work, use of personal protective equipment, emergency procedures etc.

Familiarisation training

Familiarisation training is the third stage of training and should be carried out on the job under the close supervision of a competent person.

The operator undergoing familiarisation training should be assessed on the ability to apply, under normal working conditions, the skills learnt during basic and specific job training. This should progress from simple tasks to more complex activities which the operator will be expected to carry out.

Assessment of experienced operators

Where employees claim to be trained and competent, employers should insist on evidence. This should illustrate sufficient training, and relevant experience and ability in the type of skip operations they will be required to carry out. Where such evidence is not available, the employer should arrange for an assessment of competence to be carried out by a competent person and provide any necessary training and re-assessment before allowing the employee to operate the hook/ skip loader.

Conversion training

Conversion training enables trained and experienced operators to extend the range of plant they are competent to operate. For example, a trained and competent operator of a fixed arm skip loader may wish to learn to operate a vehicle with telescopic or extending lifting arms.

Conversion training should be approached with the same attention to detail as basic training so that all gaps in, and variants on, existing skills and knowledge are covered. Training should also follow a similar pattern, i.e. basic, specific job and familiarisation training. Operators will need assessing on their ability to operate the new piece of plant in the same way as the assessment after basic training.

Refresher training

Regular refresher training will ensure operators maintain good habits, learn new skills and reassess their abilities. There is no specific time period in Law after which refresher training is required, but industry best practice suggests every 3-5 years may be reasonable in most cases.

Refresher training may also be appropriate when an operator has not used a skip loader for some time, appears to have developed unsafe practices or has an accident or near miss.

Monitoring and supervision

By the nature of the job, skip and hook loader operators are typically required, on a daily basis, to undertake potentially high risk work, often in unfamiliar and changing environments, without direct supervision.

Every employer must, therefore, have sufficient arrangements in place to supervise and monitor performance of employees out in the field to satisfy themselves that employees understand, and adopt, the safe systems of work expected of them. These should include both ‘active’ methods, e.g. spot checks on site to observe an

employee working and 'reactive' methods, e.g. investigating accidents and sickness absence records.

Whilst the level of supervision provided to employees will depend on their level of experience and competence, it should never stop completely.

Competence records

Detailed records of all training and/ or assessments of competence should be maintained for every operator.

This should include records of:

- all training, both external and in-house
- experience, including different types of skip vehicles operated
- assessments, including any assessment of training needs at initial employment and subsequently
- familiarisation on different types and models of skip vehicles, attachments etc.

PART 3
SAFE WORKING PROCEDURES

Part 3: SAFE WORKING PROCEDURES

Operators must be provided with safe systems of work to carry out their work safely.

The stability of the vehicle can be affected by the load, the task and the environment in which it is operating.

Operators must have clear instructions on what to do if they believe they cannot carry out a particular operation safely, for example due to:

- an overloaded or unsafely loaded skip or container
- insufficient headroom to retrieve the skip or container
- insufficient space and adequate levels of lighting to be able to work safely
- a skip or container on sloping, soft ground or an uneven surface

STACKING OF SKIPS

The stacking of skips on top of each other can cause stability problems, and present accessibility issues for the operator.

Empty skips can be stacked on a skip vehicle up to three high, as long as they are securely 'nested'.

Loaded, or partly loaded skips should not be stacked on top of each other, or nested in an empty skip, on the back of the skip vehicle.

When skips are stored in yards the height of the stack should be determined by risk assessment to ensure its stability. Issues such as ground conditions, accessibility for the skip loader and safe access for an operator to attach and detach chains should all be taken into account.

DROPPING OFF AND PICKING UP

Any specific characteristics of the drop/ pick up site which may require special precautions to be taken should be clearly noted and relayed to the skip operator before setting off to the job.

The vehicle must be parked on good ground, avoiding any sloping, uneven or soft ground which could affect the safe operation of the vehicle.

There must be sufficient space available between the vehicle and any obstruction to prevent the operator, or anybody else, being trapped if the vehicle lurches sideways whilst it is being levelled on the stabilisers or lifting a skip/ container.

The ability to use a remote control to operate the lifting arms may be necessary to

ensure the safety of the operator on sites where access to the operating controls on the side of the vehicle chassis is restricted by an obstruction.

No lifting operation should take place in the vicinity of any overhead obstructions that may present a danger during a lift, with particular attention paid to the presence of overhead power lines. Jersey Electricity must be contacted in advance where any lifting operation is due to take place within 10 metres of any overhead power lines. Operators should be aware of the clearance height of their vehicle.

Anybody unrelated to the operation of the skip or hook loaders should be kept away from the loading/ unloading area.

REVERSING

Reversing should be minimised as far as is possible. Where unavoidable, all reasonable measures must be taken to reduce the risks by, for example, use of reversing aids (e.g. mirrors, alarms, cameras etc.), use of a trained banksman, ensuring the reversing area is clear of other persons and obstructions etc.

Where a banksman is used, he must be trained and competent to carry out that role. There must be a clear understanding between the driver and the banksman about what the signals mean. The banksman should remain visible to the driver at all times, whilst standing in a safe position from which to guide the vehicle without being in its way. The driver should stop immediately if they lose sight of the banksman.

GROUND CONDITIONS

Operators must be given sufficient information, instruction and training to be able to carry out an assessment of the ground conditions before every skip movement to ensure, so far as is reasonably practicable, that the skip loader can operate without the risk of overloading the ground or any structure on which it needs to stand, travel over or work on.

It is important to consider what is under the ground, as well as at the surface. Examples of hazards which may not be readily apparent but can lead to sudden ground failure include:

- hardcore or thin paving overlaying soft weaker material
- backfilled excavations and service trenches
- shallow pipes and other services

- voids under concrete foundations
- cellars and basements
- hidden geological features
- poor ground adjacent to slopes sensitive to slip-failure

In order to carry out an appropriate assessment it is important to know the point loadings applied to the ground during skip movements. The supplier or manufacturer of the skip loader should provide core information, including minimum and maximum point loadings for each wheel or outrigger at different configurations.

Where necessary, additional steps should be taken to ensure adequate load bearing capacity by, for example, use of properly designed spreader pads or mats or strengthening of the ground.

PREVENTION OF RUNAWAYS

Skip and hook loaders should always be parked on good level ground. It is recognised that, due to the nature of their function, many skip movements will take place on sites where the ground may be less than perfect.

The handbrake should be applied once the vehicle is parked. The handbrake is only effective when the rear wheels are firmly in contact with the ground

Stabilisers should be used in accordance with the manufacturers' instructions. If the vehicle does not have all-wheel braking, flat plates should be fitted to the stabiliser legs.

Use chocks where necessary, particularly on slopes.

SHEETING/ UN-SHEETING

Loads which could cause danger or a nuisance from, for example, falling from the skip or being blown from the vehicle, should always be sheeted. Wherever possible, automated sheeting systems or a suitable gantry arrangement should be used, but where these are not available the containers must be placed on the ground for sheeting and un-sheeting.

The operator must perform these tasks from the ground - climbing on the vehicle should be avoided.

CHECKS BEFORE LIFTING

Before moving any skip the following should be checked:

- hooks, chains, lugs, bars etc. are fully engaged
- chains are not twisted or knotted
- the skip is in a safe condition to lift with doors, where fitted, securely locked
- the load is not overweight
- there is nobody nearby who may be at risk during the lifting operation

Hook loaders

There have been a number of accidents in the UK during the raising and lowering of waste container-skips from hook loader vehicles, due to the lifting hook slipping behind the hook bar fitted to the container-skip, or by the lifting hook connecting to the wrong part of the container framework.

The connection between the lifting hook of the vehicle, lifting mechanism and the container hook bar, should be checked to ensure it is 'slung' correctly. This may be carried out by the driver/ operator of the hook loader vehicle or an independent slinger/ banksman, standing in a safe position away from the load being lifted.

ASSESSMENT OF LOAD WEIGHT

Container-skips can be filled with a variety of materials resulting in a wide range of load weights. The operator should be able to properly assess the weight using a range of indicators - this can include visual indicators of overload of the vehicle chassis or stabilisers or in extreme circumstances the activation of the hydraulic pressure relief valve which should be set and calibrated.

FURTHER INFORMATION

Further information on the application of this ACoP, or advice on the guidance set out in this publication, may be obtained by contacting the States of Jersey Health and Safety Inspectorate.

Telephone: 01534 447300

Email: hsi@gov.je

Website: gov.je/hsi

This ACoP may also be viewed online.

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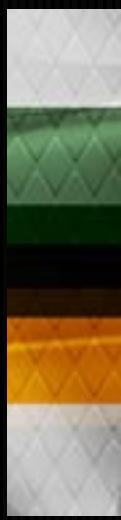

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