

## Safe Work Instruction - Lifting of Sewer Manhole Lid - Manual

**DO NOT use this plant\* unless you have been inducted in its safe use and operation by an Authorised Experienced Operator**

This SWI may not cover all possible hazards and risks and should be referred to as a control measure in the risk assessment process. Additional training may be required for high risk plant. Site and task may change required PPE.

### PERSONAL PROTECTIVE EQUIPMENT



Foot protection must be worn



Hand protection must be worn



High visibility clothing must worn

### POTENTIAL HAZARDS AND RISKS

#### Manual Task Injury

Manual task injury from incorrect manual handling techniques

Manual task injury from repetitive movements

#### Slip, Trips, Falls

Slip, trip, fall due to uneven or slippery work surfaces

Slip, trip, fall due to steep working surfaces

### PRE-OPERATIONAL SAFETY CHECKS

- ✓ Complete site specific risk assessment
- ✓ Ensure all workers have completed "Back Care Manual Handling Training" and training must be up to date

### OPERATING PROCEDURES

- ✓ Centre lift man holes should only be lifted using the Centre-to-side Lifter
- ✓ Place lifter on lid with main body facing in preferred direction of lift
- ✓ Locate lifting lug into centre lifting slot turning it 90 degrees to slot
- ✓ Tighten locking nut ensuring that lifting lug remains 90 degrees to slot
- ✓ Fix lifting handles to both sides of Lifter Body for 2 person lift or to the required side of lifter body for single person lift
- ✓ Use correct manual handling techniques, lift lid
  - For single person lift drag lid towards yourself **ensuring that it is free of the surround after the initial lift**
  - For two person lift, lift the lid up together and move to the side resting the lid on the lid surround
  - For both single and two person lifts, reposition yourself to be able to move the lid clear of the manhole
- ✓ Persons doing a 2 person lift should be careful not to swivel or reach away from their bodies
- ✓ Secure manhole opening as appropriate (grate, barricades)
- ✓ Side lift manhole lifts should only be lifted using the attachment on the Centre-to-Side Lifter or with a Lid Lifter with the following details –
  - Lengths of horizontal bar – 915mm
  - Diameter of horizontal bar – 33mm outer diameter pipe
  - Material of horizontal bar – galvanised iron pipe
  - Height of lid lifter – 570mm (minimum) 680mm (maximum)

- Diameter of lid lifter – 12mm
- Material of the lid lifter – stainless steel rod
- Lid lifter key shall be compatible to all types of side lift manhole lids
- The lid lifter shall be certified by Engineer for lifting light duty manhole lids not exceeding 75kg

- ✓ If height disparity becomes a major concern for carrying out a 2 person lift of manhole lid, a specially made lid lifter (already supplied to work crew) with an eye hole at the top of the lid lifter in conjunction with a non-slip horizontal bar shall be used to lift manhole lid
- ✓ Manhole lids should generally be lifted as a two man lift, if for any reason (e.g. on call situation, limited space around manhole etc.) lifting has to be carried out as a one person lift, then no more than 8 lifts (4 manhole) lids shall be lifted by a single person, followed by a compulsory 10 minutes break
- ✓ Concrete manhole lids shall be replaced by plastic or steel lids (subject to load considerations) where 2 person lid lifting operation becomes impossible due to the condition of terrain or the space restriction around the manhole. Employees identifying the condition in the field must report the matter to the relevant Coordinator who will take the appropriate action to implement the replacement of the lid
- ✓ Manhole lids exceeding 75kg (heavy duty lid) **shall not be lifted manually**. Heavy duty lid shall be lifted by crane or other lifting devices only by using short handled gatic lifting key for both types of lids (centre lift and side lift)
- ✓ All manhole lid lifting lugs/points must be inspected prior to any lift being carried out to determine their serviceability and condition. All defects to be reported to the relevant Coordinator as soon as possible

### ENDING OPERATIONS

- ✓ To replace lid for single person lift fix handle to opposite end of lifter body

- ✓ Lift or drag manhole lid back into position in stages as per removal
- ✓ Loosen centre lug locking nut and remove Manhole Lifter
- ✓ Ensure plant is in good working order and stored in the appropriate location

**DO NOT**

- ✗ Do not use if plant is faulty. Attach a DO NOT OPERATE tag and report fault to your supervisor
- ✗ Do not lift man hole lids with weight exceeding 75kg
- ✗ Do not swivel or lift weight away from body
- ✗ Do not hold your breath when lifting
- ✗ Do not use mobile phone while operating plant

**\*Plant in this SWI refers to any machinery, equipment, appliance, container, implement and tool.**