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## Sewer Foremen/Sewermen/Pumping Station Operators Safe Working Practices

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To comply with existing legislation, codes of practice and your employer's requirements on health and safety at work you must:-

- Take reasonable care for your health and safety of yourself and other persons who may be affected by your acts or omissions at work.
- Not interfere with or misuse anything provided in the interest of health, safety or welfare.
- Take care to see that the public are not exposed to any hazards from work processes.
- Use barrier cream before each work session and wash your hands before taking meals. Do not use degreasing agents, such as paraffin or other solvents to wash your hands. This can cause skin infections and cancer.
- Not use defective plant or equipment. Any defects must be reported.

### **RESPONSIBILITY**

- It is the responsibility of every foreman and chargehand in charge of men working in sewers to ensure that the instructions are carried out.
- Every man likely to enter a confined space, whether concerned with operation, maintenance or design, must understand the safety measures he must take and be thoroughly acquainted with the use of equipment provided for his safety.
- You should have in your possession a safety guide booklet, as issued by the Institute of Civil Engineering.
- You should receive T.A.B. inoculations and have a booster shot every three years.
- Every gang working in manholes, sewers or pumping stations must check that they have the following safety equipment:-
  - 1 - MSA Gasguard combined Oxygen/Flammable Monitor
  - 2 - 50ft Lifelines with Spring Shackles
  - 1 - Didsbury Mini-hoist
  - 1 - Full Body Lifting Harness for each member of gang
  - 1 - First Aid Kit
  - Hand Lamps

Safety Goggles  
Soap, towels, antiseptic and facilities for heating water  
Resuscitation Equipment/Breathing Apparatus.

- Every man must be in possession of a pair of gloves, protective headgear, nonferrous metal nailed knee thigh boots.
- Unhealed cuts or scratches, however small, must be covered with impermeable plaster.
- The person in charge of a gang must acquaint himself with the position of exceptional discharge from factories, swimming pools and other places which may affect the area in which the gang is to work.
- Mains operated hand lamps must only be used when the voltage is 50 volts or less.

**BEFORE ENTERING MANHOLES, SEWERS, SUMPS OR DRY WELLS (i.e. confined spaces)**

The cover of the working manhole and those immediately upstream and downstream of the working manhole must always be open to ventilate the sewer and serve as emergency exits. In addition, as many as is practicable of the other manhole covers on either side should be opened. Every open manhole must be protected by guards and where necessary with lamps.

After a sufficient period has elapsed for the sewer or manhole to be ventilated, the atmosphere must be tested by lowering monitoring equipment to the bottom of the chamber by means of a holdline. If the monitoring equipment indicates a dangerous condition by means of the alarm indicator, the manhole, sewer or sump must not be entered until tests have been repeated and the test results satisfactory. Even if the monitoring equipment indicates a safe condition, if there is a peculiar smell or if there are any suspicious circumstances, men must not enter the manhole or sewer.

The Superintendent or Foreman must sign permit for Entry into Confined Space before entry.

A mobile phone must be available so that assistance can be summoned quickly in the event of an emergency.

Smoking, naked lights or fires must not be permitted within 10ft. (5m) of any entrance to a manhole or sewers.

Two men from the gang must be detailed as top-men, and one at least must at all times remain on top.

Do not put up traffic warning signs and wear fluorescent jackets while working on manholes or sumps situated in the highway. Use your vehicle as protection with the amber flashing beacon operating.

Check with Control and obtain the weather forecast for the area. Advise Control the time of entry and when you have completed operations.

**WHILE MEN ARE IN MANHOLES OR SEWERS**

No-one should enter or travel a sewer alone.

The top-men must keep in touch with men below by calling or signaling to them at frequent intervals.

In the event of a warning being received by the top-men that conditions are likely to become dangerous, or if they themselves suspect danger, they must instruct the men below to return to the surface immediately.

The covers on manholes that were opened before entry for ventilation and emergency exit must be kept open the whole time men are in the manhole or sewer.

Striking lights or smoking in manholes or sewers is forbidden.

The men in a sewer must take with them Neotronics AGM and OTM and test the air at all times. If at any time unsafe conditions are indicated, or if there is a peculiar smell, the men must leave the sewer immediately.

When travelling a sewer, special care must be taken if it is necessary to enter a dead-end, an unventilated or sealed off manhole shaft and clearing blockages.

All men entering manholes, sewers or sumps must wear full body harness.

Rungs of ladders and foot irons must be checked for safety and kept clean to avoid undue fouling on the hands.

Gloves must be worn when cleaning around ladders and other metalwork.

Any abrasion, scratch or cut, no matter how slight, must immediately be cleaned and dressed with antiseptic gauze and impermeable plaster.

Men must avoid touching the nose or mouth with their hands or clothing.

Lifelines, safety belts and full body harness must be used to rope the men together when working in sewers with a fast-flowing current and in other dangerous places.

Guard bars or chains must be kept in position across the sewer downstream of the place of work.

#### **AFTER WORKING IN MANHOLES OR SEWERS**

The Foreman or Chargehand must take care that all men have left the manhole or sewer, and complete Permit of Entry/Exit to that effect.

Before eating and after changing clothing, all men should wash their hands and forearms with soap and water containing disinfectant (i.e. TCP).

Clean, dry and check all equipment for serviceability.

Report any sign of the presence of rats.

### **FLOOD WARNING**

The top-men must warn the men below ground immediately it commences to rain and should be on the lookout for thunderstorms. Arrangements should be made, as far as practicable with other services to prevent sudden discharge from public baths, cooking tanks, ponds, water mains or other sources, while the men are in the sewer.

### **PUMPING STATION**

The presence of Pumping Stations or any sewerage system may cause rapid variations in sewage level and thus give rise to special problems which must be considered.

### **BLOCKAGES**

A considerable head of water may build up behind a blockage and no-one should work immediately downstream until the head has been reduced to a safe level.

### **IN AN EMERGENCY**

In the event of physical injury, first aid should be given and the injured man must be brought out of the manhole, sewer or sump as soon as possible, care being taken not to aggravate the injury. Depending upon the seriousness of the injury, the Foreman or Chargehand shall decide whether medical or other assistance is required.

In the event of a man collapsing in a sewer, manhole or sump, any men with him must warn the top-man and, unless they are able to drag the casualty clear at once, leave the sewer or manhole as quickly as possible.

No further rescue attempt should be made without breathing apparatus and help must be summoned as quickly as possible by dialling 999, using R.T. (if available) and getting Control (Torwork – Paignton 550405) to alert the Fire Service that a person is trapped in a confined space and advise the Managing Director of Contract Services, the Safety Officer and the Principal Engineer.

### **SEQUENCE OF WORK**

See Schematic example as shown at Appendix 2 to CONFINED SPACES.