

## **MEDIUM PRESSURE DUCTILE IRON GAS PIPEWORK**

### **SUMMARY**

1. The HSE has issued a press release warning of the dangers of medium pressure ductile iron (MPDI) gas pipe work.

### **BACKGROUND**

2. MPDI gas pipe work can fail without warning. Pipe work located near to buildings presents a particularly high risk and needs to be replaced.

3. While Transco owns the majority of the pipe work affected, some of it is privately owned. Although the number of private owners is thought to be small, they have not yet all been identified.

4. HSE has issued a press release (attached) advising owners of large sites of the need to: establish who owns their gas pipe work; determine what the pipes are made of; and where appropriate to implement a suitable programme of replacement.

### **ACTION**

5. Members are asked to note the contents of the attached press release and to consider what action, if any, they may need to take in light of the issues raised.

## **Press Release – October 2002**

### **HSE warns of need to replace ductile iron gas mains in non-Transco Networks**

The Health and Safety Executive (HSE) is issuing an alert to occupiers of sites and Local Authorities with their own gas mains that medium pressure ductile iron (MPDI) pipes need to be replaced.

This follows enforcement action requiring Transco to carry out an agreed accelerated programme of replacement of all MPDI gas mains located within 30 metres of buildings. This work is due for completion by the end of 2002.

HSE believes that the potential risk of failure of MPDI mains located close to buildings is such that they should be replaced on all networks as soon as reasonably practicable. As a result HSE is to begin a programme of work to ensure non-Transco MPDI networks are also replaced as soon as reasonably practicable.

HSE have recently been notified of a small number of sites where such networks may be in place and are contacting the owners of these premises. The HSE are also contacting the owners of other sites such as hospitals, universities, prisons, MOD premises as well as some industrial and commercial premises to eliminate any other potential problem areas

Announcing HSE's initiative, Dan Mitchell, Head of Land Division, HSE Hazardous Installations Directorate, said:

“Presently we don't know how many of these networks exist. Although Transco have brought a number to our attention, there may be many more out there. Occupiers of large sites and Local Authorities need to establish who owns the pipes, determine what material they are made of and, where appropriate, implement a suitable programme of replacement.”

“The problem with ductile iron is that that it can fail unpredictably. In view of this and the difficulties with accurately assessing its condition, mains close to property need to be replaced as soon as reasonably practicable. As Transco's programme is drawing to a close, HSE is now turning its attention to other organisations who may own MPDI networks”

“This is an important issue and inspectors will be taking a firm enforcement line to ensure occupiers take the necessary action promptly”.

Whilst HSE are currently focusing on MPDI networks, occupiers and Local Authorities should be aware that there is also an aging population of cast iron and low pressure ductile iron networks which should be considered for replacement.

## **Notes to Editors**

1. Cast iron mains can fail unpredictably particularly through fracture if exposed to excessive loading, e.g. heavy traffic or ground movement. Ductile iron pipe was introduced in the 1970's in response to problems with cast iron. It has greater strength and flexibility compared with cast iron. Ductile and Cast Iron have now been superseded by polyethylene for all low and medium pressure mains.
2. It was later found, however, that ductile iron could fail unpredictably through corrosion. When this happens, there is a risk that the gas will track into adjacent properties, where it may subsequently be ignited. There is no evidence to show that this would happen for properties located more than 30 metres away from MPDI mains.
3. Transco has already replaced all MP cast iron mains below 12" diameter within 20 metres of property.
4. "Medium pressure" means a pressure between 75 millibar - 2 bar.
5. An Improvement Notice was served on Transco in September 2000 to confirm an agreement reached that all 'at risk' MPDI mains should be replaced by the end of 2002, a total length of 2300 km.
6. An Improvement Notice is a statutory notice requiring specified improvements to be made within an agreed time scale. A failure to comply is a prosecutable offence under the Health and Safety at Work etc. Act 1974 (the HSW Act).
7. Recipients have the right to appeal against an Improvement Notice under Section 24(2) of the HSW Act, which states: *"A person on whom a notice is served may within such period from date of its service as may be prescribed appeal to an Employment Tribunal and on such an appeal the tribunal may either cancel or affirm the Notice from or with such modifications as the tribunal may in the circumstances think fit."*

## **PUBLIC ENQUIRIES:**

Call HSE's InfoLine, tel: 08701-545500  
or write to: HSE Information Centre, Broad Lane, Sheffield S3 7HQ.