Diving Safety Memoranda
Cmdr SA Warner, Chief Inspector of Diving,
Department of Energy, Production Engineering Division, UK.

MEMORANDUM NO 23, 1978

Diving near culverts, other inlets and pipelines

It is necessary, once again, to draw the attention of diving companies and associated engineers to the dangers involved when divers are operating in the vicinity of installations or equipment that control or can produce sudden flow of water or differential pressures.

Before commencing diving operations in the vicinity of docks, locks, basins, sea chests, or pipelines adequate steps must be taken to ensure that divers will not be exposed to any sudden flow of water or differential pressure. It is essential that the following basic precautions are strictly observed:

(a) ascertain the positions of culverts, inlets, pipe ends, etc. which could in the event of penstocks, sluice valves, or valves being operated, endanger the divers.
(b) Ensure that the authorities in charge of persons in a position to operate such valves are fully informed of the area and time of any diving operations, and of the possible dangers to divers.
(c) Before any valve is operated, the operation of which would constitute a risk to the divers, all divers are to be out of the water.

Attention is drawn to the Offshore Installations (Diving Operations) Regulations 1974, the Merchant Shipping (Diving Operations) Regulations 1975 and the Submarine Pipelines (Diving Operations) 1976 all of which state that masters of vessels and installation managers shall ensure that no operations or activities which might be a danger to any person engaged in those diving operations are carried on from or on the vessel or installation and to consult the diving supervisor about those operations or activities before the commencement of diving operations. It is also the responsibility of the diving supervisor to consult with the manager of an offshore installation or the master of the vessel to ensure that divers are not put at risk by other operations or activities.

“Attention is also drawn to the Diving Operations Special Regulations 1960 and appropriate parts of Construction Regulations both of which apply to certain activities within the scope of the Factories Act, 1961. Regulations 6 of the Construction (Working Places) Regulations 1966, which deals with the safety of working places and the access and egress associated with them, is particularly relevant to many of the situations envisaged above.

“All diving work inside Great Britain (including inshore waters) is subject to additional requirements in the Health and Safety at Work etc. Act 1974 which places specific duties to ensure the safety of all persons at work not only on employers (section 2) but also on self-employed (section 3) and those who have control of working places (section 4)”

“Serious hazards to divers can also be created due to pipelines, valve gear or similar plant under an external head of water being damaged. It is essential that all such plant is constructed and installed to a high standard and that adequate steps are taken to prevent it from being damaged by natural forces or mechanical or other devices”.

MEMORANDUM NO 2, 1979

Divers operating from a dynamically positioned vessel

The attention of all diving companies and Masters of vessels carrying divers is drawn to the inherent dangers of operating divers from a dynamically positioned vessel especially in the close vicinity of structures and underwater obstructions.

A research project has been initiated aimed at producing advice on the safety parameters to be employed when using this technique.

MEMORANDUM NO 3, 1979

Diving Bell sealing doors

Discussions with the industry suggests that some companies are removing the bottom sealing doors from their diving bells when operating in the saturation mode. This habit may be acceptable when the saturation storage depth is that of the maximum depth of water.

With increased diving activities involved in “inspection and maintenance”, much of which is carried out using the saturation diving technique but with a storage depth considerably above sea bottom depth it introduces a potential hazard.

At least 3 diving bells were dropped in the North Sea Sector during 1978.

Whenever diving is conducted from a diving bell using mid-water diving techniques and the maximum water depth exceeds the internal bell pressure by more than 1 ATA, bell external and internal pressure tight seals should be shut and secured before lifting the bell to the surface.

MEMORANDUM NO 4, 1979

Sea bottom debris/danger to divers

The attention of all concession owners, offshore installation owners, diving companies and offshore installation managers is drawn to the potential danger involved with operating divers on a foul bottom.

Diver’s experience offshore indicates that as a result of a build up of “rubbish/ debris” thrown overboard from platforms or supply vessels, the dangers to divers and underwater vehicles is being made progressively worse. This danger can be aggravated by tide and current conditions.

A recent diver’s report of sea bottom conditions around a platform showed the presence of: a portacabin, generators, wires, cordage, scaffold tubing, prefabricated steel parts, rubber hoses, fishing nets, fishing lines and hooks and polythene bags. The “foul bottom” problem is inherent with fixed platforms and becomes progressively worse with the age of the platform.

Fishing is an obvious and attractive spare time activity on offshore installations. However, the loss of bottom gear consisting of hooks and lines, many of the lines being extremely high breaking strain and virtually indestructible, presents an increasing potential danger to divers and submersibles.

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