

Guidance Note: Diving Equipment Used at Work, The Written Scheme of Maintenance – 04/02. Amendment 02 – 09/11.

Anyone, including recreational diving instructors who receive payment, in cash or kind, for diving services that person is “**at work**” and is a “**diving contractor**” under the Law.

When a diving accident occurs at work, in addition to investigating the dive planning, risk assessment, and the circumstances surrounding the incident, HSE inspectors will investigate **the condition, maintenance and serviceability of the diving equipment.**

Equipment comes under **regulation 6 of the Diving at Work Regulations 1997**. The Recreational ACoP interprets this regulation and outlines a number of issues including the requirement that a “**Diving Contractor**” shall have in place a “**Written Scheme of Maintenance**”. The written scheme is a document or documents that set out the diving contractor’s approach to the use and maintenance of any equipment that is used in a “**diving project**”. The following should be considered:

1. **Suitability for the purpose:** Equipment should be chosen that would cope with all foreseeable circumstances, consideration should be given to proper fit, compatibility and cold-water performance. Cold-water performance (CE 4°C) is particularly important for dive schools that work in fresh water in winter.
2. **Written scheme of maintenance:** The diving contractor must set out a programme of inspection and maintenance for all the equipment that will be used for the “diving project” (This responsibility also extends to equipment that is owned by staff or students and used during a “diving project”) and should include:
 - Maintenance of each piece of equipment in accordance with the manufacturers’ requirements and periods.
 - Any maintenance or inspection required by a law or standard e.g. cylinder inspection/testing.
 - Regular safety/serviceability inspections.
 - Pre-dive inspection.
 - Record keeping.
3. **Manufacturers’ maintenance requirements:** HSWA and DWR require that manufacturers’ maintenance requirements, safety bulletins and maintenance periods be implemented by users and maintainers of their products. Check the owner’s manual for the recommended maintenance periods and note this in the written scheme. Failure to maintain within these periods or failure to replace the recommended components (regardless of whether an incident results or not) may be considered a breach of the law.
4. **Frequency of safety/serviceability inspections:** Equipment should be inspected/tested on a regular basis to ensure that it is in satisfactory working order. There is no statutory frequency given in the ACoP therefore, it is the contractor’s responsibility to carry out “adequate inspections”, the purpose being to prevent significant equipment problems occurring when the equipment is in use, inspection period should be chosen accordingly. Any equipment that is found to be faulty during these inspections should be set aside for repair.

5. **Pre-dive inspections:** The equipment should be checked for correct function and fit immediately prior to the dive. A thorough buddy-check may be adequate, however, these checks must be carried out by a “competent person”; novice divers cannot be considered competent, therefore, buddy-checks must be directly supervised by the instructor or other competent person. Note: The diving contractor continues to have a duty of care even if the persons in their charge hold a certificate of diver competence. A record of the pre-dive check should be included in the dive log and be signed by the person who supervised them.
6. **Equipment owned by staff and students:** The diving contractor has a duty of care for the whole diving project and therefore any equipment used, regardless of ownership, is the contractor’s responsibility. Equipment owned by individual staff members will be subject to the requirements of the written scheme; equipment owned by the student should be inspected for suitability and serviceability by a competent member of staff prior to use.
7. **Gas Purity Testing:** The COSHH Regulations require breathing gas purity testing in accordance with BS EN1202. For fixed systems, testing should be monthly unless records over a period show consistent quality, in which case this may be extended to 3 monthly. Portable systems should be tested prior to first use at each site.
8. **Cylinder Contents and Marking:** Cylinders should be labelled and colour coded in accordance with BS EN ISO 7225. There is concern about cylinders being used for different breathing mixtures without the labelling being changed accordingly. Convenience is not an acceptable reason for this practice. See ASSET Guidance notes 08/06 and 06/99 for information regarding cylinder marking and the relevant standards. Label artwork is available (FOC to members) from ASSET.
9. **Documentation**
 - a) There should be a record of all equipment owned by the contractor with identifying marks and a note of the manufacturers’ maintenance periods for each make and model. If the equipment is not new at the time of setting up the written scheme, the date of last maintenance should be noted and maintenance/inspection periods should begin from this date.
 - b) There should be a file detailing the manufacturers’ maintenance requirements and procedures.
 - c) A record of all maintenance and repairs should be held on file. If the maintenance is not carried out in house, a copy of the maintainer’s worksheet, report or test certificate should be obtained and kept on file.
 - d) A record of all interim/serviceability inspections must be held on file.
 - e) Pre-dive inspections should be noted in the project diving log.
 - f) Air purity tests must be recorded and held on file.

Training: Maintenance must be carried out by a “Competent Person”.

Note: ASSET certified technicians are trained in all aspects of inspection and maintenance of diving equipment and compressor operation and management.

Applicable ASSET Codes of Practice:

- CP1 – Maintenance of Scuba Equipment.
- CP2 – Cylinder inspection and testing.
- CP2-C – Composite cylinder inspection and testing.
- CP3 – Oxygen cleaning.

This guidance is offered in good faith and is believed to be correct to the best of our knowledge. Nothing contained herein shall be deemed to override good practice, manufacturers' policies, the relevant Standards and the Law.

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