

## DEWEY WATERS LIMITED

### OPERATING & MAINTENANCE INSTRUCTIONS

#### SECTIONAL WATER STORAGE TANKS (CISTERNS)

1. Dewey Waters Limited tanks are manufactured from GRP, which is a non-corrosive material and as a consequence requires little or no specific maintenance other than good housekeeping.
2. The basic tank construction comprises a series of GRP panels bolted together to form the tank size required. The inner surface of the panels, in contact with the water, has a smooth finish and which by its nature does not readily attract or retain dirt.
3. Any internal supports or fasteners in contact with the water are manufactured from high-grade stainless steel. External fasteners and supports, unless otherwise specified, are galvanised.
4. Once a sectional tank has been successfully commissioned and put into use there is virtually no requirement to attend to its structure. The method of panel jointing means that once an effective joint has been made it will remain watertight unless disturbed.
5. With regard to regular checks and inspections we would refer to the following contained in BS 6700: 2006: para 7.5.
  - 5.1 Tanks storing drinking water should be inspected annually or more frequently if contamination is suspected.
  - 5.2 Tanks shall be inspected to ensure that overflow and warning pipes are clear, that covers are adequate and securely fixed and that there are no signs of leakage or deterioration likely to result in leakage.
  - 5.3 Tanks should be drained, any debris removed and disinfected and refilled (see 6.2) Tanks empty for a short while should not leak when refilled. If any leaks occur when the tank is refilled these are rectifiable by tightening the bolts in the immediate area of the leak. The bolts should not be over-tightened. Consult with DWL in the event of any problem.

#### **Dewey Waters Limited**

Heritage Works, Winterstoke Road, Weston-Super-Mare BS24 9AN

Tel: +44 (0)1934 421477 • Fax: +44 (0)1934 421488

E Mail: sales@deweywaters.co.uk • Web: www.deweywaters.co.uk

Registered in England No: 3839643 • VAT Registration No: 742 1271 62

Directors: T Stisted, A O'Connell



Certificate No: 135

Assessed to ISO 9001 : 2000



5.4 Where practicable a check should be made for stagnant water and if found the configuration should be modified so that the flow displaces the whole of the contents continually when the tank is in routine use. This particularly applies to internally flanged tanks.

6. We would also recommend the following points be checked.

- 6.1 Inspect and confirm the effectiveness and operation of the ball valve.
- 6.2 Inspect and ascertain the cleanliness of the tank. Sediment may be drawn into the tank via the inlet and may collect in the tank. This should be removed by using the washout facility (drain), accompanied by, in the case of heavy deposition, a thorough washing down. **NO** abrasive cleaners or equipment must be used. Where this cleaning has been necessary the tank will be required to be re-chlorinated prior to re-commissioning.

(where no washout facility is provided then the tank should be drained by any other means available. Residues of water remaining in internally flanged base panels should be pumped out.)

7. Inspect the tank externally for any signs of dampness around it's base which may be due to

- a) Leaking connections
- b) Condensation
- c) Slackened fasteners

With particular reference to c), if the operation of the tank involves frequent filling and/or emptying, or large variations in water levels, it is recommended that a check on bolt tightness is carried out as a precautionary measure even though no leaks are evident at the time of inspection.

8. Inspect all the tank fittings and connections to ensure that

- a) All air vents, overflow and warning pipe screen filters are clean and unobstructed
- b) The manway access and ball valve covers are secure and sealed.
- c) No stagnant water is found
- d) Any fitted access ladders are securely fixed

#### Dewey Waters Limited

Heritage Works, Winterstoke Road, Weston-Super-Mare BS24 9AN

Tel: +44 (0)1934 421477 • Fax: +44 (0)1934 421488

E Mail: sales@deweywaters.co.uk • Web: www.deweywaters.co.uk

Registered in England No: 3839643 • VAT Registration No: 742 1271 62

Directors: T Stisted, A O'Connell



Certificate No: 135  
Assessed to ISO 9001 : 2000



9. Some of the above activities will mean inspection / maintenance personnel requiring either:

- for lid mounted manways - access up to the height of the tank lid or onto it;
- for side access manways - access up to and through the manway

For both options a safe system of work should be risk assessed and implemented.

10. Where a tank (or in the case of partitioned tanks a section of the tank) has remained empty for a prolonged period, it will be necessary to check all fastenings and seals prior to re-filling to prevent leaks occurring due to the relaxation of the fasteners and the seals.

11. Please note that when undertaking maintenance, personnel should not, under any circumstances, stand on the tie bars as this may cause the seals where they pass through the side panels to be damaged and cause leaks.

#### 12. ACCESS UP TO BUT NOT ON TO LID OF TANK

12.1 Where permanent access ladders have been supplied as part of the tank package by DWL, then a SSW utilizing the permanent ladder, and as determined by risk assessment, should be implemented by the client / user.

#### 13. ACCESS ON TO THE LID OF THE TANK

13.1 Access to the height of the lid should be by risk assessed means as above. The SSW should then additionally extend to access on to the tank roof. If permanent railing is fitted the SSW should incorporate its use. If no permanent railing is fitted then the SSW should determine other means of operating safely on the tank roof. These could include the use of safety harnesses, fall arrest equipment or edge protection.

14. Should it be required, DWL would be pleased to carry out these regular maintenance inspections either on a one off basis or as part of a regular scheduled maintenance programme. Our Sales Department would be pleased to give you full details and a quotation for this service.

#### **Dewey Waters Limited**

Heritage Works, Winterstoke Road, Weston-Super-Mare BS24 9AN

Tel: +44 (0)1934 421477 • Fax: +44 (0)1934 421488

E Mail: sales@deweywaters.co.uk • Web: www.deweywaters.co.uk

Registered in England No: 3839643 • VAT Registration No: 742 1271 62

Directors: T Stisted, A O'Connell



Certificate No: 135  
Assessed to ISO 9001 : 2000

