

**Review of Procedures for Operation and Maintenance of the Distribution Network
Procedure for the Routine Operation of Valves**

Checklist for Procedure Assessment

Water Company:

SCOPE

The procedure is expected to cover the routine operation of valves for planned maintenance and for mains isolation for burst repair. The assessment is to determine the extent to which procedures and operations minimise the possibility of discolouration of supplies.

GENERAL

Is there a documented procedure that covers this aspect of operation (Yes or No)?
If not, go straight to BBV Assessment of Company Procedure at the end of the checklist

Company title of procedure:

Company procedure reference

Date when procedure came into force

Is the procedure specific to this type of operation or is it general covering several aspects of supply and distribution management (Specific or General)?

SHUTOFFS FOR PLANNED MAINTENANCE

If the procedure classifies the shutoffs into categories such as routine, minor or major, list the categories and describe the basis of classification or enter none.

Category	Basis of classification
•	•
•	•
•	•
•	•

If there are different requirements for each category, summarise these below.

Category	Summary of requirement
•	•
•	•
•	•
•	•

Does the procedure require that the area subject to the shutoff be identified as one of high, medium or low risk (or other ranking) of potential discolouration problems (Yes or No)?

Is there a requirement to simulate performance during the shutoff by network modelling or by other means (Yes or No)?

If simulation of performance is required, are those mains that will experience reverse flow to be identified (Yes, No or N/A)?

If simulation of performance is required, are those mains likely to experience increased velocities to be identified (Yes, No or N/A)?

Does the procedure provide guidance on the maximum velocities for different pipe diameters above which discolouration problems could arise (Yes or No)?

If simulation of performance is required, does it identify from increased velocities and from reverse flow, areas of distribution where discolouration could arise from the shutoff (Yes, No or N/A)?

If simulation of performance is required, are the results of the simulation to be documented (Yes, No or N/A)?

Does the procedure provide criteria to judge whether the shutoff should be carried out during periods of low demand (at night) or can be undertaken during normal working hours (Yes or No)?

Where a similar operation in the same part of the network has been carried out in the past without discolouration problems, does the procedure say that no further assessment is required (Yes, No or N/A)?

Does the procedure require that consumers affected by the shutoff be notified (Yes or No)?

Does the procedure include for liaison with other Company departments to avoid any conflict between the planned shutoff and other activities (Yes or No)?

MAINS ISOLATION FOR BURST REPAIR

Does the procedure require an assessment of the impact of possible discolouration of supplies from providing alternative supply arrangements (Yes or No)?

Does the procedure include for liaison with other Company departments to avoid any conflict between the burst repair and other activities eg the commissioning of capital works (Yes or No)?

RECHARGING AFTER COMPLETION OF THE MAINTENANCE OR REPAIR

Does the procedure give guidance on the method of recharging the main to ensure the removal of air (Yes or No)?

Does the procedure give guidance on the flushing locations to remove both air accumulations and sediment (Yes or No)?

Does the procedure specify for mains of different diameter the flushing discharge rate required to generate adequate velocities to cleanse the main (Yes or No)?

Does the procedure require consideration to be given to the timing when the main should be brought back into service to minimise the risk of discolouration problems (Yes or No)?

Does the procedure give guidance on the speed of operation for a range of valve sizes (Yes or No)?

INCIDENT RESPONSE

Where the operation results in discolouration or customer complaints, does this procedure refer to other procedures for dealing with discolouration of supplies (Yes or No)?

If it does, give the Company title and reference of the procedure or procedures.

BBV ASSESSMENT OF COMPANY PROCEDURE

Is there a written Company procedure (Yes or No)?

If there is no Company procedure, the recommendation is for a procedure to be drafted and the further assessment below is not required.

Shutoffs for planned maintenance - does that part of the procedure covering shutoffs for planned maintenance give proper regard to minimising the potential for discolouration of supplies (Yes or No)?

If not, identify those areas where the procedure is considered deficient.

Mains isolation for burst repair - Does the procedure provide for adequate notification to consumers and other Company departments of the operational activity (Yes or No)?

If not, identify those areas where the procedure is considered deficient

Recharging - Does the procedure provide adequate guidance on recharging the main to minimise the possibility of a discolouration of supplies (Yes or No)?

If not, identify those areas where the procedure is considered deficient

Incident response - Does the procedure refer to other procedures for responding to discolouration incidents (Yes or No)?

If not, the recommendation is to make such a reference.

BBV Quality Assurance

Checklist completed by Date

Checklist checked by Date