

Schedule 1: Specification for Operator Supply of Potable Water

Water Supply Assessment Checklist

Complete one checklist for each water source being assessed.

A: SUPPLIER DETAILS

| | |
|--------------------------------|--|
| RMP No. | |
| Person who completed checklist | |

B: WATER SOURCE

Tick the box representing your water source and then go to the appropriate part of the checklist as indicated.

- | |
|---|
| <p><input type="checkbox"/> Deep bore water (i.e. bore greater than 10m deep) – Go to B1</p> <p><input type="checkbox"/> Surface water (e.g. bore less than 10m deep, spring, well, river, stream, dam, lake, reservoir) – Go to B2</p> <p><input type="checkbox"/> Roof Water – Go to B3</p> |
|---|

B1: DEEP BORE WATER (i.e. bore > 10m deep)

Tick the appropriate boxes in the table below and then move on to the relevant parts of the checklist as appropriate to the responses given.

| Yes | No | Question |
|-----|----|---|
| | | Is the bore less than 10m deep? |
| | | Is the soil/rock types such that contaminants could flow into the groundwater? |
| | | Is surface water able to drain into the bore, due to the bore-head being inadequately sealed? |
| | | Is the bore-head in an area prone to ponding and flooding? |
| | | Do farmed animals have access to the bore-head? |
| | | Is there any septic tank/long drop toilet outlet within 100 metres from the bore-head? |
| | | Do any of the following water characteristics change after rain? (you will need records of this to confirm these statements) |
| | | Colour |
| | | Temperature |
| | | Turbidity |
| | | pH |
| | | E. coli or faecal coliform count |



If all responses are NO, the water is secure, go to C, Water Storage

If any responses are YES, the water is not secure. Record details of problem(s) in row B1 of Table D. If the problems can be eliminated from the water supply permanently, eliminate the problem and then go to C, Water storage. If problems cannot be eliminated permanently, go to B2 and complete the questions for surface water.

If all responses are YES, the water is not secure - go to B2 and complete the questions for surface water.

B2: SURFACE WATER

E.g. Shallow bore (less than 10m), deep bore - not secure, spring, dam, lake, reservoir, stream

Tick the appropriate boxes in the table below and then move on to the relevant parts of the checklist as appropriate to the responses given.

| Describe the water source (including name where appropriate) | | | |
|--|-----------------------------|--|----------------|
| <input type="checkbox"/> | Shallow bore..... | <input type="checkbox"/> | Dam..... |
| <input type="checkbox"/> | Deep bore - not secure..... | <input type="checkbox"/> | Lake..... |
| <input type="checkbox"/> | Spring..... | <input type="checkbox"/> | Reservoir..... |
| <input type="checkbox"/> | Stream..... | <input type="checkbox"/> | River..... |
| <input type="checkbox"/> | Other (specify)..... | | |
| Yes | No | Question | |
| | | Are any of the following within 50 metres of the water source? | |
| | | Offal pit / soak hole | |
| | | Animal effluent to pasture | |
| | | Sumps, stock yards or feed pads not connected to an approved effluent system | |
| | | Fuel tanks | |
| | | Timber treatment facility | |
| | | Abandoned or decommissioned wells | |
| | | Septic tank / long-drop toilet | |
| | | Land disposal site/refuse pit | |
| | | Silage stack | |
| | | Chemical preparation/storage | |
| | | Pesticide residues | |
| Do you have any of the following water problems? | | | |
| You will need records of this to confirm these statements | | | |
| | | Bacterial contamination | |
| | | Turbidity | |

| | | |
|--|--|---|
| | | Sediment |
| | | Colour |
| | | Smell |
| | | Taste |
| Do any of the following factors present risks to the water? | | |
| | | Spray drift |
| | | Nearby factories |
| | | Mining operations |
| | | Material from effluent ponds or surface impoundments (waste ponds or lagoons) - either treated discharge or leakage |
| | | Contaminants washed into source during irrigation |
| | | Geothermal contaminants (e.g. arsenic, boron, lithium etc) |
| | | Saline water |
| | | Possible flooding (consider council land information/LIM reports) |
| | | Other factors (Specify here); |



If all responses are NO, continue with B2

If any responses are YES, record details of problem(s) in row B2 of Table D then continue with B2



B2: SURFACE WATER (Continued)

Tick the appropriate boxes in the tables below and then move on to the relevant parts of the checklist as appropriate to the responses given.

| Describe the surface water type |
|--|
| <input type="checkbox"/> Flowing water (e.g. unsecure bores, rivers, streams, springs) – Go to B2(i) |
| <input type="checkbox"/> Confined water (e.g. dams, lakes, reservoirs) – Go to B2(ii) |

B2(i): FLOWING SURFACE WATER

| Yes | No | Question |
|-----|----|---|
| | | Is effluent discharged less than 2 km upstream of the water intake and if yes, is effluent discharged less than 4 hours before water is taken from that source? If Yes to both statements, state water source |
| | | Do farmed animals have access to within 10m of the water intake? |
| | | Is industrial or urban stormwater discharged to the source water upstream of the intake? |

If all responses are NO, go to C, Water Storage

If any response is YES, record details of problem(s) in row B2(i) of Table D and then go to C, Water Storage

B2(ii): CONFINED SURFACE WATER

| Yes | No | Question |
|-----|----|---|
| | | Is the water accessible to farmed animals? |
| | | Is effluent discharged into the dam/lake/reservoir? |
| | | Is industrial or urban stormwater discharged into the dam/lake/reservoir? |



If all responses are NO, go to C, Water Storage

If any response is YES, record details of problem(s) in row B2(ii) of Table D then go to C, Water Storage

B3: ROOF WATER

Tick the appropriate boxes in the table below and then move on to the relevant parts of the checklist as appropriate to the responses given.

| Yes | No | Question |
|-----|----|--|
| | | Roofing Materials: |
| | | Are any of the following materials used on the water collection surfaces? |
| | | Galvanised iron? |
| | | Lead materials (lead nails, flashings, paint)? |
| | | Asbestos materials? |
| | | Paint or other surface treatment in poor condition? |
| | | Roof environment |
| | | Is the roof overhung by trees? |
| | | Are there any other factors that could encourage birds or other pests to move about or settle on the roof? |
| | | Atmospheric fall out |
| | | Are there industrial (including agricultural chemicals) or natural sources of atmospheric fall out? |
| | | Is there any ash/soot deposit on the roof? |
| | | Roof maintenance |
| | | Are the gutterings left for more than a month before cleaning them out? |



If all responses are NO, go to C, Water Storage


If any response is YES, record details of problem in row B3 of Table D and then go to C, Water Storage

C: WATER STORAGE

| Describe Water Storage Facilities |
|--|
| <input type="checkbox"/> Do not have holding tanks – Go to Table D if problems have been identified in the previous parts, or E if no problems have been identified in the previous parts. |
| <input type="checkbox"/> Have holding tanks – Go to C1 |

C1: HOLDING TANKS

| Yes | No | Question |
|-----|----|---|
| | | Is the outlet of the holding tank below or level with the base of the tank, allowing any debris that has settled to be sucked out with the water? |
| | | Is the water in holding tanks prone to stagnation that results in deterioration of water quality? |
| | | Are holding tanks inspected and maintained less than once per year? |
| | | Are holding tanks dirty and not cleaned when necessary? |
| | | Are holding tanks uncovered allowing access by animals, or other debris or other contaminants into the tanks? |


If all responses are No, the water STORAGE is satisfactory. Go to table D and check that any other problems identified in the checklist are followed up



If any response is Yes, the water STORAGE is not satisfactory. Record details of problem in row C1 of Table D then fill out rest of Table D

Table D: CORRECTIVE ACTION

Wherever there was a “Yes” answer in the part of the checklist referred to, write the details of the problem identified into the correct row of this table. Fill out the rest of the table to show whether or not the problem is a source of contamination; and where possible what you have done to eliminate the problem and permanently prevent the contamination from occurring (e.g. preventing animal access, no longer using chemicals in the vicinity of the collection area, resurfacing roof etc).

| Ref | Problems identified | Biological hazard, chemical hazard or turbidity issue caused by the problem(s) | Action taken to address problem(s) | Problem | |
|----------------------------------|---------------------|--|------------------------------------|----------------|-------------------|
| | | | | Eliminated (✓) | Still Remains (✓) |
| B1 Deep bore water | | | | | |
| B2 Surface water | | | | | |
| B2(i) Flowing surface water | | | | | |
| B2(ii) Confined surface water | | | | | |
| B3 Roof Water | | | | | |
| C1 Holding Tanks | | | | | |
| E Initial water testing | | | | | |

If problems have been permanently eliminated, a water management plan is not needed. Go to E

If some problems still exist, record the problem in the first row of D1 and then fill out the rest of D1 with how this problem will be managed on an ongoing basis

D1: WATER MANAGEMENT PLAN

A water management plan is required where there are any problems that are not managed with your water supply.

This water management plan covers the routine, ongoing water treatment undertaken or actions to ensure that the water is potable, or it may include routine testing conducted to demonstrate that the problem (that cannot be permanently eliminated) is being controlled on an ongoing basis such that treatment is not needed.

A separate D1 should be completed for each problem that needs to be managed from Table D.

| |
|---|
| Document and implement a water management plan. |
| Remaining problem from Table D: |
| <p>Method to manage the identified problem</p> <p><input type="checkbox"/> Filtration</p> <p><input type="checkbox"/> Chlorination</p> <p><input type="checkbox"/> Ultraviolet light</p> <p><input type="checkbox"/> Ozone</p> <p><input type="checkbox"/> Routine ongoing testing to demonstrate control</p> <p><input type="checkbox"/> Other (Specify).....</p> |
| <p>The treatment is done in accordance with the procedures:</p> <p><input type="checkbox"/> provided by the manufacturer / supplier of the water treatment system (<i>attach</i>); or</p> <p><input type="checkbox"/> given below: <i>(enter details where relevant, e.g.- equipment type, equipment maintenance (frequency, activity and method, e.g. for replacement or cleaning filters or replacement of UV lights),- other control measures, (e.g. addition of chlorine or ozone, frequency, method, any limits (e.g. concentration of chlorine, monitoring frequency)), what is checked (e.g. chlorine level, turbidity) and method, corrective action to be taken when limits exceeded or not met):</i></p> <p>OR</p> <p><input type="checkbox"/> Details of the routine testing to demonstrate that the problem is being controlled on an ongoing basis (test, frequency).</p> |
| Other ongoing control measures (either frequency, activity and method, e.g. for routine cleaning of roof or tanks): |

Once this table is completed go to E

E: INITIAL WATER TESTING

| Yes | No | Question |
|-----|----|---|
| | | Has a microbiological test for <i>E.coli</i> or faecal coliforms been done on this source within the last month? |
| | | If a particular chemical hazard was identified as likely to occur during completion of this checklist, has a relevant chemical test been done on this source within the last month? |

↓

If any response is NO, get the relevant tests done, then

If all responses are YES

↓

| Name the laboratory which did each test | | |
|---|--|--|
| | | |

| Yes | No | Question |
|-----|----|---|
| | | Does the water satisfy the microbiological criteria in Table 1: Quality of Potable Water? |
| | | For any additional chemical tests done, does the water satisfy the requirements of the current DWSNZ? |

↓

If any response is No, Go to Table D and review / improve the corrective actions taken. Repeat the testing and corrective action process until the water is satisfactory

↓

If all responses are yes
The water is satisfactory. No further action is needed until reassessment of the water supply is required (see clause 4, reassessment of the water supply) or further water testing is required in accordance with the requirements of Table 2, Frequency of Ongoing Testing