**Sanitary inspection form: Tube well with hand pump**

| **Sanitary inspection questions** | | **No** | **Yes** (risk) | **If Yes, what action is needed?** |
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| **1** | **Is the tubewell sometimes unavailable for use (e.g. locked or covered)?**  The tubewell should be accessible at all times. If it is locked, a key should be available so facility staff can access the water supply. | □ | □ |  |
| **2** | **Is the hand pump damaged or loose at the point of attachment to the casing so that contaminants could enter the tubewell?**  A damaged or severely corroded pump, or a loose pump that is not securely attached to the casing, may allow contaminants to enter the tubewell (e.g. contaminated surface water during wet weather). | □ | □ |  |
| **3** | **Is the area around the tubewell seal[[1]](#footnote-1) unsanitary?**  Signs of pollution (e.g. faeces) in the area directly around the tubewell seal increase the likelihood of contaminants entering the tubewell. | □ | □ |  |
| **4** | **Is the apron around the tubewell absent or inadequate so that contaminants could enter the tubewell?**  A missing apron, or any gaps, deep cracks or faults in an existing apron may allow contaminants to enter the tubewell. Erosion under the apron may also allow surface water to enter the tubewell. For adequate protection, the apron should be at least 1 metre wide all around the tubewell, sloping down towards a collar to catch and divert water to a drainage channel. | □ | □ |  |
| **5** | **Is the drainage inadequate, which may result in accumulation of water in the tubewell area?**  An absent, damaged (e.g. deep cracks) or blocked drainage channel, and/or absence of a downward slope for water to drain away from the tubewell to a functioning soakaway, could result in ponding and stagnant water entering the tubewell, particularly during wet weather. | □ | □ |  |
| **6** | **Is the fencing or barrier around the tubewell absent or inadequate so that animals could enter the tubewell area?**  If the fencing or barrier around the tubewell is absent, broken or poorly constructed, or the entry point (e.g. gate) is damaged or does not close securely, animals could contaminate or damage the tubewell area. | □ | □ |  |
| **7** | **Is there sanitation infrastructure within 15 metres****[[2]](#footnote-2) of the tubewell?**  Sanitation infrastructure (e.g. latrine pit, septic tank, soakage field, sewer line) close to groundwater supplies may affect water quality (e.g. by seepage or overflow and subsequent infiltration). You may need to visually check structures in the vicinity to see if they are sanitation related, in addition to asking residents. | □ | □ |  |
| **8** | **Is there sanitation infrastructure on higher ground within 30 metres**13 **of the tubewell?**  Groundwater may flow towards the tubewell from the direction of the sanitation infrastructure. Pollution on higher ground poses a risk, especially in the wet season, as faecal material and other pollutants may flow into the tubewell. | □ | □ |  |
| **9** | **Can signs of other sources of pollution be seen within 15 metres13 of the tubewell (e.g. animals, rubbish, commercial activity, open defecation, fuel storage)?**  Faeces on the ground close to the tubewell constitute a serious risk to water quality. Contaminants from other waste (e.g. household, agricultural, industrial) may leach into the aquifer and contaminate the water. | □ | □ |  |
| **10** | **Is there any point of entry to the aquifer that is unprotected within 100 metres13 of the tubewell?**  Any unprotected point of entry to the aquifer (e.g. uncapped/open well or borehole) is a direct pathway for contaminants to enter the tubewell. | □ | □ |  |
| **Total number of risks identified (i.e. “Yes” ticks):** .....**/10** | | | |  |
| * + Low risk: 0–2 “yes” answers 🡪 meets criteria   + Medium risk: 3–6 “yes” answers 🡪 partially meets criteria   + High risk: 7–10 “yes” answers 🡪 does not meet criteria | | | |  |
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| **ADDITIONAL DETAILS**  (e.g. remarks, observations, recommendations, additional remedial actions). Attach additional sheets and photographs, as necessary. | |
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| **WATER QUALITY TEST RESULT FOLLOW-UP**  If sampling for water quality analysis was completed during the inspection, provide details of who the results were provided to, and when. | |
| **Name of person receiving water quality analysis results:** |  |
| **Date received:** |  |

1. A tubewell seal protects the tubewell from surface water contamination, filling the below-ground area underneath the hand pump unit, and between the tubewell casing and the earth. [↑](#footnote-ref-1)
2. General guidance only. Appropriate minimum safe distances depend on local factors, including soil type and permeability, depth of the water table, and volume and concentration of contaminants. Refer to [*Guidelines for drinking-water quality, second edition: Volume 3 – Surveillance and control of community* *supplies*](https://apps.who.int/iris/bitstream/handle/10665/42002/9241545038.pdf?sequence=1&isAllowed=y)(WHO, 1997) for guidance on determining minimum safe distances for potentially contaminating activities. [↑](#footnote-ref-2)