

Site Inspections: General

Water Level- Monthly (Flood warning only 2 monthly visits)

Parameter	Record Meter Number	Record time (5 / 15 minute punch)	Special instructions:	Record	Handheld Calibration / Validation	Site Calibration / Validation	Acceptable Deviation	Action if outside limits:
Water Level ESG	n/a	yes	Read to the nearest millimetre. Record error (smallest should be 3 mm). If surging note on form, and record the average level. If there is slope across the staff gauge record the value on the left hand side of the scale.	Staff gauge reading, staff gauge error & Logger Value	Laser and Levels annually	5 years	5 mm	Note on form, Non-conformance, and then consider purging/flushing the system and checking orifice/intakes. Check long term trends for site bias. If in high flow then note for follow up at lower stage for recheck. (Zero check PT's to check drift). Check system for water in gas equipment and float condition. Check condition of ESG and orifice, consider site survey if suspect and time allows.
Water Level EPB	n/a	yes	Record EPB and logger readings.	EPB reading & Logger Value	Laser and Levels annually	5 years	3 mm	Note on form, Non-conformance, and then consider purging/flushing the system and checking orifice/intakes. Check long term trends for site bias. If in high flow then note for follow up at lower stage for recheck. Zero check PT's to check drift. Check system for water in gas equipment and float condition. Check condition of ESG and orifice, consider site survey if suspect and time allows.
Water Level Continuous	yes	yes	(e.g. Radar, Pressure transmitter, shaft encoder) Read ESG, laser level or EPB to nearest mm.	Staff gauge reading, staff gauge error & Logger Value	As above	Monthly	5 mm	Note on form, Non-conformance, and then consider purging/flushing the system and checking orifice/intakes. Check long term trends for site bias. If in high flow then note for follow up at lower stage for recheck. Zero check PT's to check drift. Check system for water in gas equipment and float condition. Check condition of ESG and orifice, consider site survey if suspect and time allows.
Water Level Flood Warning (not funded for water allocation / WQ quality)	yes	yes	(e.g. Radar, Pressure transmitter, shaft encoder) Read ESG, laser level or EPB to nearest mm.	Staff gauge reading, staff gauge error & Logger Value	As above	2 Monthly	10mm	Note on form, Non-conformance, and then consider purging/flushing the system and checking orifice/intakes. Check long term trends for site bias. If in high flow then note for follow up at lower stage for recheck. Zero check PT's to check drift. Check system for water in gas equipment and float condition. Check condition of ESG and orifice, consider site survey if suspect and time allows.
Ground Water Level	yes	yes	Record EPB or well probe and logger readings.	Well probe or EPB & Logger Value	Well Probes annually	3 Monthly	50 mm	Note on form, Non-conformance. Check long term trends for site bias. If inconsistent then consider purging the system and checking orifice. Zero check PT's to check drift, should be offset at zero head. Check condition of ESG and orifice, consider site survey if suspect and time allows.
Flow Meters	yes	yes	Record the logger values and meter values.	Meter value & Logger Value	Annually	Annually	2%	If outside then rate test and check pulse output consistency if pumping, if not then schedule for next available opportunity. If rate test Passes then refer to consent holder and service agent to establish nature of fault If fails then suggests pulse output fault, check with oscilloscope and resolve.

Site Inspections: General

Water Quality (Monthly Visits)

Parameter	Record Meter Number	Record time (15 minute punch)	Special instructions:	Record	Handheld Calibration / Validation	Site Calibration / Validation	Acceptable Deviation	Action if outside limits:
Water Temperature	yes	yes	Sampled as close to the sensor as practical	Logger Value & Handheld	12 monthly	2 months	0.5 degrees	Note on form, Non-conformance, Ensure field meter is correct, check settings (4-20mA etc), replace sensor.
Dissolved Oxygen Saturation	yes	yes	Readings are only taken while the hand held sensor is stirred. (Flows above 0.3m/s do not require stirring)	Controller Value & Handheld	daily	12 monthly	8%	Note on form, Non-conformance, Ensure field meter is correct, clean sensor / inspect for damage. Replace sensor if needed.
Dissolved Oxygen Concentration	yes	yes	Readings are only taken while the sensor is stirred	N/A	daily	n/a	n/a	n/a
Conductivity	yes	yes	Readings as close to the sensor or pump intake as practical	Logger Value & Handheld	daily	12 monthly	50 µS	Note on form, Non-conformance, Ensure field meter is correct, recalibrate field sensor / replace if needed.
pH	yes	yes	Readings as close to the sensor or pump intake as practical	Logger Value & Handheld	daily	3 monthly	1 pH units	Note on form, Non-conformance, Ensure field meter is correct, recalibrate field sensor / replace if needed.
Turbidity	n/a	yes	Sampled as close to the sensor as practical. Note if cleaned. Sample if over 20 FNU.	Controller Values	n/a	samples	n/a	n/a

Weather (3 Monthly)

Parameter	Record Meter Number	Record time (15 minute punch)	Special instructions:	Record	Handheld Calibration / Validation	Site Calibration / Validation	Acceptable Deviation	Action if outside limits:
Rainfall	yes	Record time period when test tips occurred	Check gauge dipstick and flask or weight readings must be taken. Record each flask or weight reading on the form. Record the % difference between TB3/OTA and check gauge (primary/check gauge), manual tips and when they occurred, if a validation occurred, if anything was blocked, anything else that might affect the final data quality.	Dip stick reading Flask readings or scales Total Flask % deviation Test tips	Scales Annually	Annually	10%	Note on form, Non-conformance. If the primary rain gauge is more than 10% off the flask reading or scales reading, perform a validation or schedule a validation in accordance with the rainfall procedure. Check Long term trends.
Wind Speed	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Wind Direction	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Relative Humidity	yes	yes	Sampled as close to the sensor as practical	Hand held & Logger Value	Annually	n/a	n/a	n/a
Air Temperature	yes	yes	Sampled as close to the sensor as practical	Hand held & Logger Value	Annually	n/a	0.8 degrees	Note on form, Non-conformance, Ensure field meter is correct, check settings (4-20mA etc) replace sensor.
Barometric Pressure	yes	yes	Handheld Calibrated to the Victoria Street Sensor	Hand held & Logger Value	monthly	annually	3 hPa	Note on form, Non-conformance, Ensure field meter is correct, recalibrate / replace field barometer.
Soil Moisture	n/a	n/a	Do not disturb sensor	n/a	n/a	n/a	n/a	n/a
Soil Temperature	n/a	n/a	Do not disturb sensor	n/a	n/a	n/a	n/a	n/a