



Version No: 01 Issue Date: 04/02/2012 Portfolio:	<b>Horizons Regional Council</b>	Section No: 6.47 Page: 1 of 1
<b>horizons</b> regional council 	<b>Hydrology Operations Manual</b>	 <b>horizons</b> regional council

## Volumetric Gauging Quality Code: Method Code (14)

### Overview:

A volumetric gauging must meet all of the criteria otherwise the quality significantly deteriorates. Criteria for quality coding volumetric gaugings are detailed below:

Quality Code	Criteria	NEMS Adopted
<b>QC 600</b>	<ul style="list-style-type: none"> <li>Random error &lt;5%,</li> <li>WL reference if rating applicable (flow relationship)</li> <li>WL measured through gauging (ESG, Logger)</li> </ul>	22/1/2015 1/1/1994
<b>QC 500</b>	<ul style="list-style-type: none"> <li>Random error <math>5\% \geq x &lt; 10\%</math></li> <li>Gauging is compromised in some way and is a fair representation of the monitored parameter</li> <li>Measured data does not meet operational standards/best practice at time of acquisition</li> <li>No WL reference if building relationship to flow</li> <li>No measured WL through gauging (ESG, Logger)</li> </ul>	22/1/2015 22/1/2015 22/1/2015 22/1/2015 22/1/2015
<b>QC 400</b>	<ul style="list-style-type: none"> <li>Random error <math>\leq 10\%</math></li> </ul>	1/1/1994
<b>QC 200</b>	<ul style="list-style-type: none"> <li>Un-calibrated instruments</li> <li>Gauging which cannot be verified</li> <li>External/ not quality coded to meet NEMS</li> <li>Volumetric if missing: <ul style="list-style-type: none"> <li>- calculated uncertainty/standard deviation,</li> <li>- calibrated container,</li> <li>- minimum 10 fillings,</li> <li>- maximum time to fill greater than 10 seconds for each fill</li> </ul> </li> </ul>	22/1/2015 22/1/2015 1/1/1994 22/1/2015 22/1/2015 22/1/2015 22/1/2015

1. Add Quality Code to digital Hilltop Face card of Hydrometric Gauging
2. Note Quality Code on front of physical gauging card in **pencil** with initials of who completed the check and date of check
3. Repeat for Hilltop Face card print out
4. Update Gauging Register with whom checked the gauging and select the checked box
5. Hand in to the Data Team to Archive