AI-02-EQUIPMENT LABELLING

Ver.1 Date: October 2014

1. SCOPE

This specification provides a standard method of labelling equipment and pipework at Watercare facilities (excluding wiring and electrical equipment, which is covered in Specification EC-03-Electrical equipment – colour coding, identification and labels).

2. EQUIPMENT IDENTIFICATION

The method of coding/numbering of equipment is not within the scope of this section. That can be found in the 'Asset Identification and Capitalisation' section and the documents linked to it in the Project Delivery Manual.

3. STANDARDS AND SPECIFICATIONS

The relevant parts of the following standards shall apply to the labelling of pipework and equipment:

NZS 5433 PARTS 1&2 Transport of dangerous goods on land - Parts 1 & 2

NZS 5807: Code of practice for industrial identification by colour, wording or other coding

4. GENERAL

It is essential that all pipes and equipment are identified clearly by a label.

Labels shall be engraved traffolyte (white background, black lettering) for electrical switchboards, FCABs and DBs, stamped stainless steel or anodised aluminium with Envirocoat. Labels on tanks can be of self adhesive vinyl, if compatible with the tank material, so that the label will be permanent. All labels and the printing on these labels are to be UV stabilised, if located outside. For attaching to concrete stainless steel billet plate should be used with an epoxy fixing glue.

NB: For all Wastewater sites substitute anodised aluminium tags with 316 Stainless Steel – etched / black colour-filled labels.

Font shall be Arial. Font width may be compressed to 75% to enable letters to fit onto the label.

Labels generally comprise the equipment number with a plant description under this, on one or two lines as needed, i.e. up to 3 lines. The equipment number shall be on the top line. The description follows on the next two lines (e.g. chlorine analyser) with the second line used if it is not clear in the field what the equipment is attached to or serves (e.g. treated water). A flow switch (e.g. low flow switch) need not have the second line (e.g. raw water pump 2) if it is clear in the field that the switch serves that pump. If the flow switch is remote from the pump and it is not obvious in the field that the switch serves the pump, then the second line is needed thus:

Raw Water Pump 2

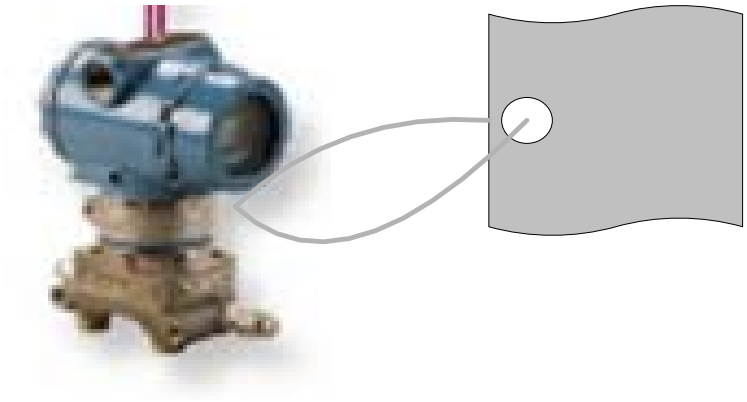
Low flow Switch

The equipment number font size is 50% larger than the plant description font size. Minor equipment, e.g. limit switches, is identified by equipment number only.

Labels shall be placed as close as practical to the equipment and where practical, attached to a permanent structure.

Installation and fastening shall be by either stainless steel fasteners (including rivets where appropriate), stainless steel wire looped around the equipment, through the label and crimped (typically used on instruments) or epoxy glue.

Instrument labels shall be 'double sided'. Likewise, for instruments the fasteners should be reusable or easily replaced, since they need to be detached from time to time when the instruments are serviced or replaced.



Typical Stainless Steel label attached to an Instrument

Labels shall be subject to the approval of Watercare. Approval shall be sought prior to the commencement of label manufacture.

Safety Signs, Pipework Identification and Gas Cylinders are to comply with NZS 5807:1980 (including all amendments or replacement to that date)

Hazardous Substances Identification to comply with the relevant parts of NZS 5433:2007 (including all amendments or replacement to that date)

Labels shall follow the examples given. However the size of the label selected is to be in proportion to the equipment, i.e. small labels for small equipment and large labels for large equipment.

5. ABBREVIATIONS

Site equipment numbers shall be abbreviated to exclude the facility code as the equipment is located at the facility and where such abbreviation does not affect identification near the boundaries of facilities.

The facility codes are useful to determine where facilities start and stop, particularly in the network system, e.g. a rising main asset can physically start inside or be next to a pump station.

e.g.

WRKHY-99-LT041	Khyber Reservoir 4 Level Transmitter

becomes

99-LT-041	Reservoir 4 Level Transmitter

6. EXAMPLES

Type 1
50mm x 10mm
e.g limit switches

99-ZSO-013

5mm Lettering

Type 2
100mm wide
30mm high 3 lines
22mm high 2 lines

20-LSL-402
RAW WATER WET WELL
LOW LEVEL SWITCH

7mm Lettering
5mm Lettering
5mm Lettering

Type 3
150mm wide
50mm high 3 lines
35mm high 2 lines

Letter size 10 and 7mm

51-PU-01
RAW WATER MAIN
RAPID MIX PUMP 1

Type 4
300mm wide
100mm high 3 lines
70mm high 2 lines

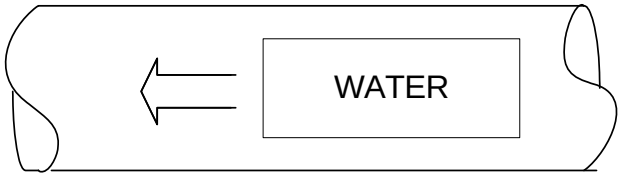
Letter size 20 and
15 mm

56-BL-31
GAC
AIR SCOUR BLOWER 1

52-TK-01
TANK CLARIFIER 1

Type 5
Standard size 460x200
Major lettering Approx 60 mm Minor lettering 40 mm
Colour Black writing on white background or to suit application
Material to be Anodised Aluminium with Envirocoat,
Laminated Plastic (or equivalent) or Self Adhesive Vinyl

Type 6
Pipework



Standard sizes 400x50 and 200x25
Pipework Identification to comply with NZS5807;1980
UV resistant colour fast screening on Self Adhesive Vinyl

Related Standards: EC-03-Electrical Equipment - Colour Coding, Identification and Labels