**Queensland Water Directorate (*qldwater*)** ***e-*flash**

**Information for Water Industry Managers and Practitioners in the Queensland Water Industry**

**(Issue #223 – 06 March  2014)**

**1.   Invitation for public comment – new draft fire fighting standard**

**2.  Dial Before You Dig Damages Reporting System**

**3.  *qldwater* NQ Conference & AWA North Queensland Regional Conference – call for abstracts**

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**1.   Invitation for public comment – new draft fire fighting standard**

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We have recently been advised that DR AS2419.1 – Fire Hydrants -System Design & Installations (Revision of AS 2419.1-2005) has been released for public comment.  Comments close on 1 April 2014 and can be submitted on the Standards Australia hub by setting up a free registration:

<https://sapc.standards.org.au/sapc/public/listOpenCommentingPublication.action>

<https://cas.standards.org.au/cas/login?service=https%3A%2F%2Fsapc.standards.org.au%2Fsapc%2Fj_acegi_cas_security_check>

Ben Wilson from Queensland Urban Utilities ([ben.wilson@urbanutilities.com.au](mailto:ben.wilson@urbanutilities.com.au)) has kindly offered to share ideas with other interested service providers.  The documentation is extensive, and there is no known “mapping” to clearly identify the proposed changes from the previous version.

The following summary is prepared from Ben’s advice:

         The standard is the general standard used by building private fire hydrant system designers and maintenance contractors, primarily for industrial, commercial and higher density residential complexes like units, nursing homes etc.

         The standard specifies minimum hydrant flows and pressures for builders and property owners to install and maintain under building legislation, usually involving regular, scheduled compliance tests to be performed.

      Use of the standard within the Queensland Property and Fire Industry for customer’s properties can often trigger customer inquiries and/or complaints to water service providers, particularly around flow and pressure availability from the mains   and perceived minimum levels of fire service that the water service provider does/should provide to on-site systems.

Areas of the Standard that water service providers may be interested in reviewing and submitting public comments on are:

         **“Minimum” flow and pressure determination methods.**  These are the methods listed in the Standard for hydraulic designers to follow in determining the minimum available flows and pressures to be assumed in the design of the on-site system.  These methods have different limitations and issues e.g. Fire industry “single-point-in-time” field testing vs. water service provider hydraulic modelling.    Issues can arise when these methods are different from water service provider methodologies, or where the designer overestimates the short-term or long-term available mains pressure, and the customer’s fire system fails to meet the Standard’s minimum pressure performance requirements at some point in its lifecycle.

         **Minimum fire-fighting pressure requirements.**    There are significant disparities between water service provider minimum fire-fighting pressures, versus DR AS2419.1’s minimum pressure requirements for private hydrants.   Issues can arise when the water service provider network minimum fire-fighting pressures do not provide on-site building standard minimum pressures, and creates tension between water service providers, builders and customers as to what are reasonable service level expectations/cost apportionment.

         **Allowable Metering Assembly Configurations.**  DR AS2419.1 has introduced restrictions on allowable fire service metering arrangements.   There are several potential resulting issues from this new section, not limited to questions as to whether utility metering standards should be written by the building and fire industry, and the draft’s requirements conflicting with established metering design principles and regulations.

         **Commissioning Procedures.** What field test methodologies the building commissioning team/certifier should follow to ensure the fire system will provide minimum pressures across the full potential range of available mains pressure, and how to account for natural mains pressure variations during the commissioning process.

         **Allowable Internal Hydraulic Losses.** The standard generally allows relatively restrictive on-site pipework to be installed, which may cause issues when the network does not have the excess pressure to overcome potentially high internal hydraulic losses, and the building’s fire hydrant system does not meet the Standard’s minimum pressure requirements as a consequence.

A quick reference guide to the relevant Sections/Clauses below:

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| **Element** | **Section(s)** |
| Water Mains Minimum Available Fire-Fighting Pressures           Designer Calculation Methodology | Clause 4.2.6  Appendix I (Informative) |
| Minimum Fire Hydrant Delivery Pressures           Minimum Attack Hydrant Pressures           Minimum Feed Hydrant Pressures | Clause 2.2  Table 2.7  Table 2.6 |
| Allowable Metering Assembly Configurations | Clause 4.3.1.3 |
| Commissioning Procedure          How to check whether system is compliant the mains pressure on commissioning day is higher than minimum available pressure | Clause 11.4  Appendix S (Normative)  Appendix T (Informative) |
| Allowable internal hydraulic/head losses | Clause 2.3 |

The Water Services Association of Australia has promoted the review to its members but is not coordinating a single submission.  ***qldwater*** is not in a position to convene discussions in the timeframe, so members are encouraged to consider their own direct submissions.

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**2.  Dial Before You Dig Damages Reporting System**

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Managing damage to underground infrastructure is a challenge for all utilities and Dial Before You Dig has developed a tool to help.  The Damages Reporting System is now available, building on a similar product which has been operating in the U.S. for a number of years.

The tool was recently reviewed by the ***qldwater*** Technical Reference Group.  It is both user friendly and sophisticated enough to be able to store map references for incidents, along with extensive metadata, and incident photographs.  It is capable of producing a number of different location-based management reports and is possible to integrate with other GIS and asset management systems.

Telstra has uploaded all of its historical incidents to the tool.  While specific information about incidents is currently not able to be shared between utilities (what you put in is only yours to see, apart from the high-level, de-identified management reports), further uptake of the tool will build a valuable dataset, paving the way for more data sharing in the future.

Dial Before You Dig is keen to see water service providers make use of the software in the interests of improving this dataset, and has offered to make the tool available to all Queensland Water Service Providers free of charge, whether current DBYD members or not.

It should be noted that damages reporting at a high level will be included in the new DEWS Key Performance Indicator Framework, with indicators covering water and sewerage main breaks as well as those caused by third parties.  While SWIM will record these values, the tool offers a richer dataset to assist in managing reactive and preventative maintenance programs.

If you would like to obtain a guest login to trial the “sandbox” for the tool, please contact Paul Newman, Manager Dial Before You Dig Queensland, at [pnewman@1100.com.au](mailto:pnewman@1100.com.au).

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**3.  *qldwater* NQ Conference & AWA North Queensland Regional Conference – Call for Abstracts**

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***qldwater*** 29 July 2014 – Call for papers opening soon

AWA 30 - 31 July 2014 - Abstracts closing 10 March

Water service providers and the supporting private sector industry continue to maintain a robust and efficient water sector in North Queensland. The Queensland Government has raised many interesting questions in the development of the 30 Year Water Strategy and this conference will explore what the themes of this strategy mean for the industry in North Queensland.  The AWA conference on 30-31 July is being held in conjunction with the ***qldwater*** NQ Conference and Best of the Best Water Taste Test being in Mackay on 29 July.

If you are able to contribute to the topics and themes from a direct or indirect perspective, or have an innovative approach to some of these topics or other issues submit your synopses. There is consideration for all disciplines and for persons from all levels in an organisation from the new graduate to the chief executive, and for independent operators with views and new technical information to share across the industry.

[Download more information](https://www.awa.asn.au/uploadedFiles/Content/Events/AWA%20NQ%20Call%20for%20Papers%202014.pdf)

[Abstract template](https://www.awa.asn.au/EventDetail.aspx?id=4294978925)

[***qldwater*** Conference and Taste Test Information](http://www.qldwater.com.au/Mini-Conferences)

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