# SANS 3001 BY SABS. WHERE DO WE GO TO FROM HERE?

AN OVERVIEW OF WHERE WE STAND AT PRESENT

**BY BARRY PEARCE** 

LEARNING MATTERS ETC

# CONTENTS

- OVERVIEW OF PUBLISHED METHODS
- CURRENT METHODS UNDER REVIEW
- WHAT'S UP FOR REVIEW?
  - STANDARD/GENERIC CHANGES FOR ALL.
- 4<sup>TH</sup> SEPT MEETING
- INDUSTRIES ISSUES

1 35

• SO WHERE TO FROM HERE?

# SANS 3001 SERIES – UNDER REVISION

- Revision requests handed in after review in Dec '16 & Jan '17.
- To date still no revisions finalized or re-published
- Currently those circulated for comment have additional points that have been raised in the 2 year period since submitting the proposed changes
- Similar with CO methods but its been ongoing for up to 6 years

PART	Published	Under Revision	
AG	17	17	
AS	8	8	
BT	7	3	
GR	22	20	
NG	5	1	
PD	1	0	
PR	4	0	
BSM	1	0	
CO	3	(27)	
4001	5	0	
3208	1	0	

Totals	74	49
--------	----	----

# **"STANDARD" CHANGES**

 Technical guideline TG4: water quality for use in civil engineering testing laboratories

 WATER, For use in civil engineering laboratory testing, with clear (non-turbid), uncoloured appearance and without odour, complying with the requirements of Table 1.

 In SA, municipal water sources are by law required to be tested regularly & the results communicated to consumers.

• The results so provided would be acceptable as proof of quality.

• New sources or sources without such testing would require chemical analysis to determine compliance.

#### • NOTE:

• For CLASS 0 Water distilled or demineralised water is likely to be suitable.

 In SA, tap water from major municipalities is likely to be of suitable quality for CLASS I Water,

• Water sources used for drinking will probably comply with CLASS II.

# **TECHNICAL GUIDELINE TG4: REPLACEMENT FOR SANS 241**

1	2	3	4	5
Class	Description of typical use	Maximum electrical conductivity (EC) at 25 °C	Maximum total dissolved salts (TDS)	pH range at 25 °C
0	Reagent quality for analytical chemical testing	0,5 mS/m	2 mg/L	5,0 to 7,5
I	Tests requiring high water quality	170 mS/m	1200 mg/L	5,0 to 9,7
I	General testing requirements	370 mS/m	2 400 mg/L	4,0 to 10,0
-	For general use where no class has been specified	-	-	-

NOTE 1 For class I and class II water TDS determination is only required for concrete; and cement and lime stabilization testing, where non-ionic substances such as sugars or other organic matter might be present and would not be detected by the EC.

NOTE 2 Distilled or demineralized water is likely to be suitable for class 0. In South Africa tap water from major municipalities is likely to be suitable for class I, while water sources used for drinking will probably comply with class II.

NOTE 3 In South Africa municipal water sources are by law required to be tested regularly and the results communicated to consumers. The results so provided would be acceptable as proof of quality. New sources or sources without such testing, would require chemical analysis to determine compliance.

### "STANDARD" CHANGES (CONTD.)

- Temp range changed to ± e.g. : 105 °C ± 5 °C
- SANS GR20 to be reallocated as SANS PR20
- Sample quantities to "at least" as against "approx"
- All references to samples to include "representative" sample
- All 200 mm sieves revised to "at least " to all use of 300 mm sieves
- Change "aggregations" in all cases to "agglomerations"
- Move away from mercury use in the laboratories
  - Manometers & thermometers
- **Water density from 997 kg/m³ at 25 °C to ΔWD** 
  - Temperature range looking at from 15 °C 30 °C
- Remove all reference to
  - TMH1 Existing apparatus
  - CETA Qualification

# MEETING WITH SABS - 4<sup>TH</sup> SEPT 2019

- Mr S Bissoon (SABS Director of Standards) & BP<sup>2</sup>
- Agenda points covered
  - Process with adopting EN documents (CO)
  - **Processing time** too long a process
  - Standards processes same as above
  - **Cost of standards** too expensive
- Although most items where resolved in principle, no exact dates could be provided by SABS as to when the matters would be resolved

#### **INDUSTRIES ISSUES**

- Inaccuracy of current published methods
  - ISO 17025 Accreditation audits
  - Decisions made on out-of-date methods that influence result, payments, life span of structures & cost of possible disputes as a result of incorrect decisions.
- Extreme delays in updating methods to most recent revisions
  - Internal process for final publication is far too winded & inefficient
- **Cost of standards** 
  - Technical input provided by industry experts
  - Funding for the revisions by SANRAL
  - Poor service from SABS in the provision of the service one is paying for

# SO THE QUESTION IS : HOW DO WE GO FORWARD?

#### **Currently SABS is battling on many fronts**

- Costing of standards to funds standards libraries existence
- Staff shortages
- Etc, etc, etc.....
- Its difficult to put a specific time line to when SABS will be up & running both
  - Effectively
  - Efficiently
- Can we, as the infrastructure industry, afford this status quo?

# **SO THE QUESTION IS : HOW DO WE GO FORWARD?**

- **Remove SANS 3001 methods & 4001 specifications from SABS** 
  - **Return into industry control (SABITA, TCI, MTC or similar)**
  - **Until SABS "back in business"** 
    - Then return them to their custody
  - Main risk copyright issues
  - Proposed only due to extreme frustration with SABS lack of service relevant International nethods adopted by SABS will

remain with them 3310-2, EO 1810 SANS 3310-1 & 3310-2, EO 18 SANS 3310-1 & 3310-2, EO 18 SANS 3310-1 & 3310-2, EO 19 SANS 10 Based, SANS 1649 10 Based, SANS 1649

remain with them

- Leave SANS 3001 & 4001 with SABS
  - & Hope for the best .....

### **BENEFITS OF TAKING OWNERSHIP OF** SANS 3001 & SANS 4001 METHODS

MAJOR NEGATIVE

Convright issues

they offer

defend this as they are not

providing the service they say

- Far quicker turn around in correcting/updating methods that require revisions
- Costing non-issue as they will be freely available
- Currently all new methods being developed (besides SANS 1083) remaining in industries control Not sure if they'll be able to legally
  - THM1
  - **Explanation of SANS 1083**
  - **BSM** methods
  - **TG1 modified binder tests**
  - Coto

1 35

# SO THE QUESTION IS : How do we go forward?

- NLA-SA has proposed to assist in this issue on behalf of the broader laboratories fraternity
  - This matter is affecting all NLA-SA members besides civils industry
    - Water, stack emissions/environmental, electrical, etc, etc etc.
  - Seen by NLA-SA BoD as a major issue related to quality
  - In fact, this affects anybody & everyone who makes use of standards
- Might be worthwhile to put a group of independents together to see if any additional headway can be made.