

Report on Industry Documentation

RPF May 2009

Guidelines on LIC

- **Covered in the presentation on the APT Steering Committee by Les Sampson**

Revision of COTO specifications

- **More appropriate to cover this at a later stage**

TRH 12

- **Conversion of software based on Sabita Manual 16: REACT (Economic analysis of short-term rehabilitation actions) from DOS-based to Windows undergoing final testing**
- **Once complete – incorporated into TRH12 revision currently underway**
- **This work was financed from the CAPSA 07 surplus**

Revision of TMH1

- **13 methods published (available on SABS web store – SANS 3001)**
- **A further 8 methods in the SABS process (including MDD and CBR) – expected to be published within the next two months**
- **A further 30 methods in progress – target to have them incorporated in SABS by year end**
- **Amendments to specifications will become necessary progressively e.g. S 8102 of COTO specifications**

Launch of TRH 21: 2009

Hot Mix Recycled Asphalt

- **Manual Launch**

- **9 June – Gauteng**
- **10 June – W Cape**
- **11 June – KZN**

- **Presenters**

- **Tony Lewis**

- **Registration on-line at**

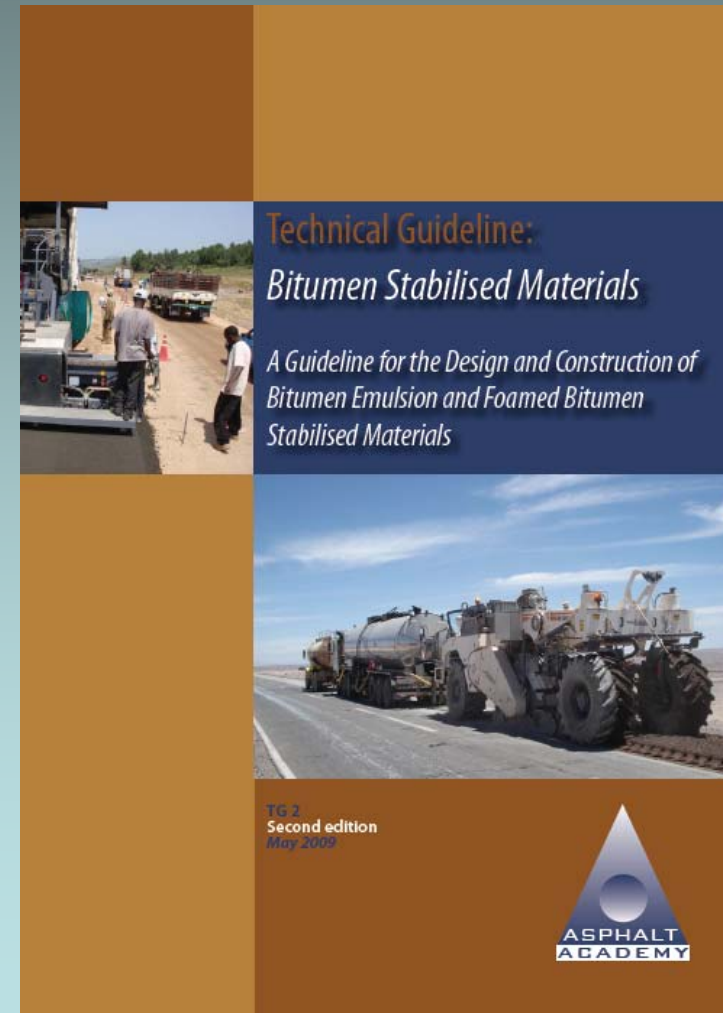
- **www.asphaltacademy.co.za**



TG 2: Bitumen Stabilised Materials

A Guideline for the Design and Construction of Bitumen Emulsion and Foamed Bitumen Stabilised Materials

- Manual Launch next week
 - 19 May – Gauteng
 - 20 May – KZN
 - 21 May – W Cape
- Presenters
 - Fenella Long
 - Kim Jenkins
 - Dave Collings
 - Joe Grobler
 - Les Sampson
- Registration on-line at
 - www.asphaltacademy.co.za



**Revision of TRH 20
Unsealed Roads:
Design Construction and
Maintenance**

Background



- **TRH 20 published in 1990**
- **Draft for upgrading**
- **CSIR (with Gerrie Van Zyl of PDNA) appointed to revise and improve**
- **Completion 7/11/2008**
- **Included 3 workshops**
- **Guided by a Steering Committee of 7 (DoT, SANRAL & KZN DoT)**
- **“If it isn’t broken, don’t try and fix it” philosophy**

Abbreviated Terms of Reference

- **To document existing best practice in southern Africa;**
- **To refer and comment on appropriate practices worldwide;**
- **To collate recent research results;**
- **To identify typical pitfalls & common errors;**
- **To define the minimum standard for an unsealed road in South Africa; and ...**

Terms of Reference/cont...

- **To provide specific guidelines regarding:**
 - **Appropriate design standards**
 - **Location and selection of suitable materials (incl mechanical and chemical stabilization)**
 - **Construction techniques/methods (including labour-based techniques) & recommended adjustments to current COTO spec)**
 - **Quality assurance**
 - **Appropriate maintenance and remedial measures and timing**
 - **Appropriate maintenance techniques for varying situations and conditions in southern Africa**
 - **Evaluation of alternative maintenance/ improvement strategies taking into account economic, environmental, social and sustainability considerations.**

Process followed

- **Critically assess old document**
- **Review of local and international literature**
- **Interviews with practitioners and authorities**
- **Comments from Steering Committee on 1st draft**
- **Revise as necessary**
- **Advertise 3 workshops (Pretoria, Bloemfontein, Cape Town)**
- **Circulate draft to respondents (± 120)**
- **Hold workshops and record comments**
- **Finalise TRH 20**
- **Submit to DoT (Dec 2008)**
- **RCB approval as TRH (May 2009)**



New structure

Old TRH 20	New TRH 20
<p>1 Introduction (2.5 pp)</p> <p>2 Defects (10.5)</p> <p>3 Design (8)</p> <p>4 Construction (7.5)</p> <p>5 Maintenance (10)</p> <p>6 Rehab and upgrading (1)</p> <p>7 Economic aspects (2)</p> <p>8 References (37 No)</p> <p>4 Appendices (10)</p>	<p>1 Introduction (4 pp)</p> <p>2 Performance (8)</p> <p>3 Design (27)</p> <p>4 Construction (8)</p> <p>5 Maintenance (7)</p> <p>6 Management (new - 6)</p> <p>7 Investigation & maintenance measure selection (new - 12.5)</p> <p>8 Safety aspects (= old 5.4 -1p)</p> <p>9 Rehab, improvement and upgrading (old 6 - 3.5 pp)</p> <p>10 References (51 No)</p> <p>2 Appendices (3)</p>

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Present:**Primary Producers**

Simon Coe
Jacques van Heerden
Mike Zacharias

Chevron SA
Sasol Oil
Shell Oil Products Africa

Secondary Producers

Kobus Louw
Herman Marais
Johan Muller
Wynand Nortje

Colas SA
Much Asphalt
Tosac

Clients

Krishna Naidoo
Dennis Rossmann
Otto Ueckermann

eThekweni Municipality
SANRAL
GPTRW

Research

Kim Jenkins
Johan O'Connell

University of Stellenbosch
CSIR

Consultants

Joe Grobler
Wim Hofsink
Terence Milne

Vela VKE
PDNA
Avrecon

Contractor

Nico Wilcocks

Roadspan

Facilitators

Trevor Distin
Piet Myburgh

Sabita (Chairman)
Sabita

Apologies:**Primary Producers**

Ronnie Muthusamy
Des O'Brien
Welcome Tlale

Engen Petroleum
Masana
Engen Petroleum

Research

Benoit Verhaeghe

CSIR

Absent:**Primary Producers**

Khamis Khamis
John Sibiya

BP SA
Total SA

CEMENT STABILISATION

- **Protocol for assessment of working times and site temperatures**
- **Very limited response so far (3 projects)**
 - **Lab versus site experience**
 - **Need full details regarding cement types and test procedures**
- **Please contribute information where possible**
- **Details from Bryan Perrie or Phil Paige-Green**

bryan@cnci.org.za

ppaige@csir.co.za

CEMENT STABILISATION

WORKSHOP:

- **Planned for day after Infrastructure session at SATC in Pretoria (8 July, 2009)**
- **Objective - to workshop problems with stabilization and to define the way forward**
- **Invites will be sent to RPF mailing list and any one else interested / who could contribute**
- **3 or 4 brief introductory presentations followed by interactive discussions**