

ROAD PAVEMENT FORUM

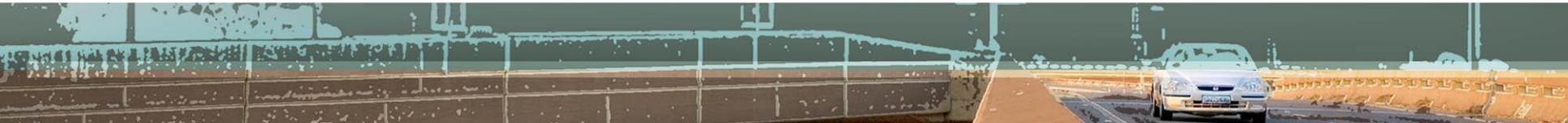
6 – 7 May 2013

Bitumen specifications



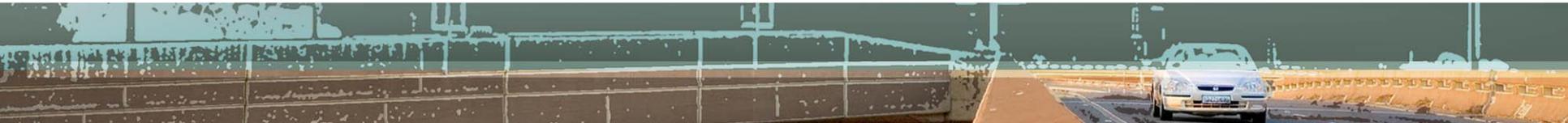
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BITUMEN SPECIFICATIONS

RPF RESOLUTION TO COMBINE ALL BITUMEN TYPES UNDER A SINGLE STEERING COMMITTEE, WITH APPROPRIATE WORKING GROUPS TO ADDRESS SPECIFIC PRODUCTS



BITUMEN SPECIFICATIONS

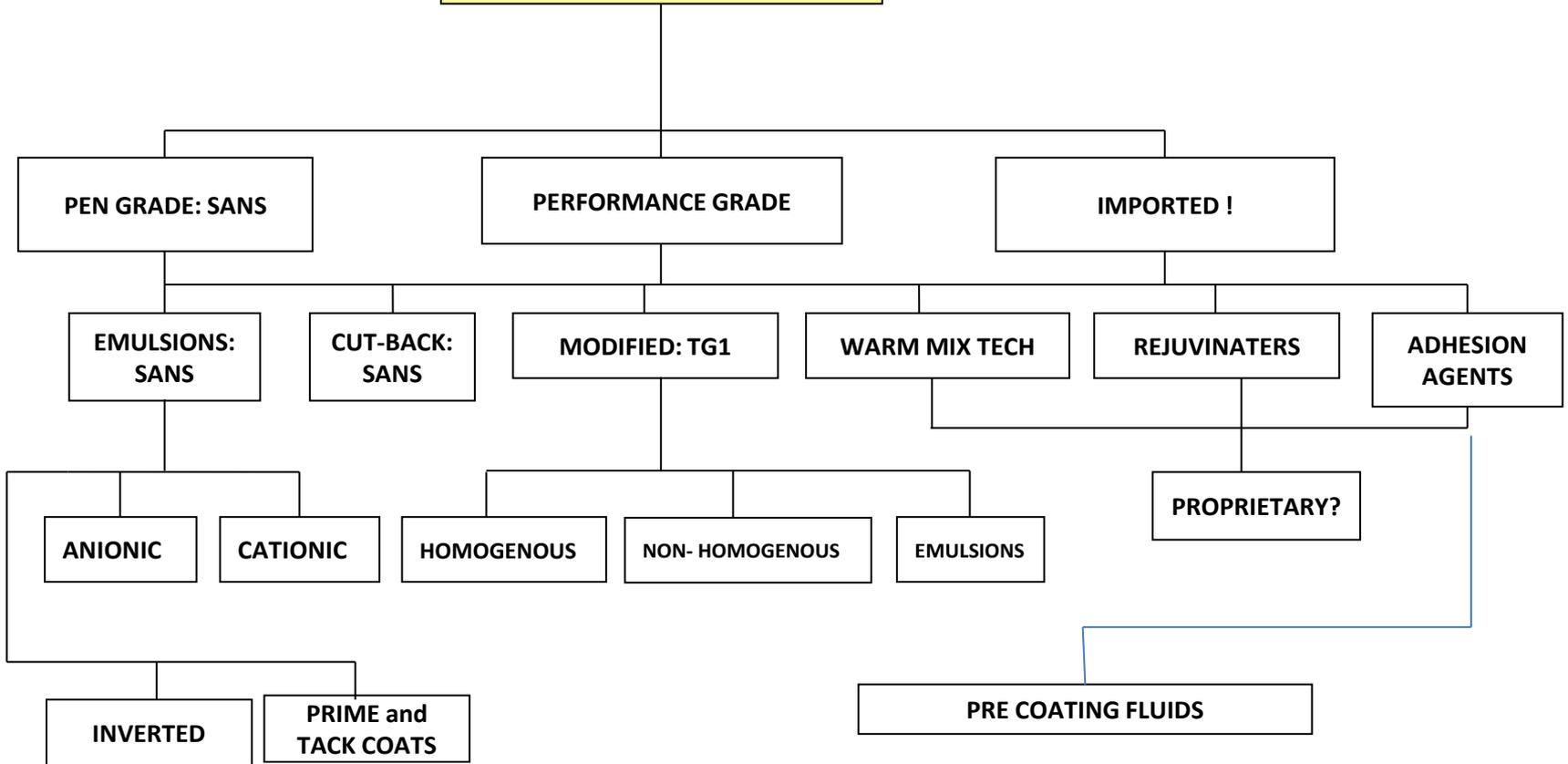
- Bituminous binders but a component of the final product and thus should not be assessed in “isolation”
- Focus only on “technical” issues and NOT procurement/contractual issues

BITUMEN SPECIFICATIONS

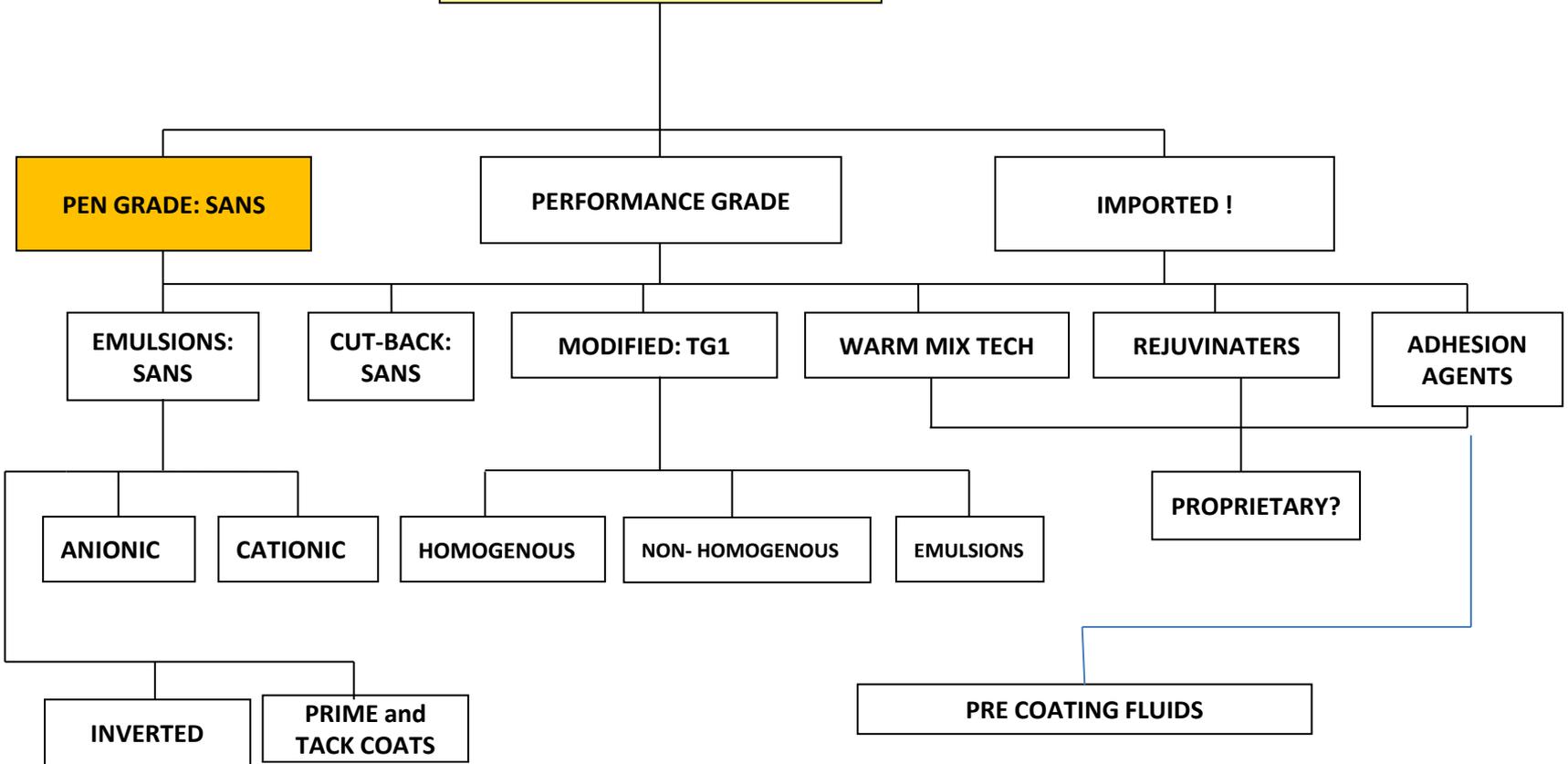
BITUMEN CHARACTERISATION AND PROPERTIES MUST BE ALIGNED WITH “FINAL PRODUCT” REQUIREMENTS:

- SAPDM
- HMA DESIGN
- SURFACE SEAL DESIGN
- “WINTER SEAL” REQUIREMENTS

BITUMEN!



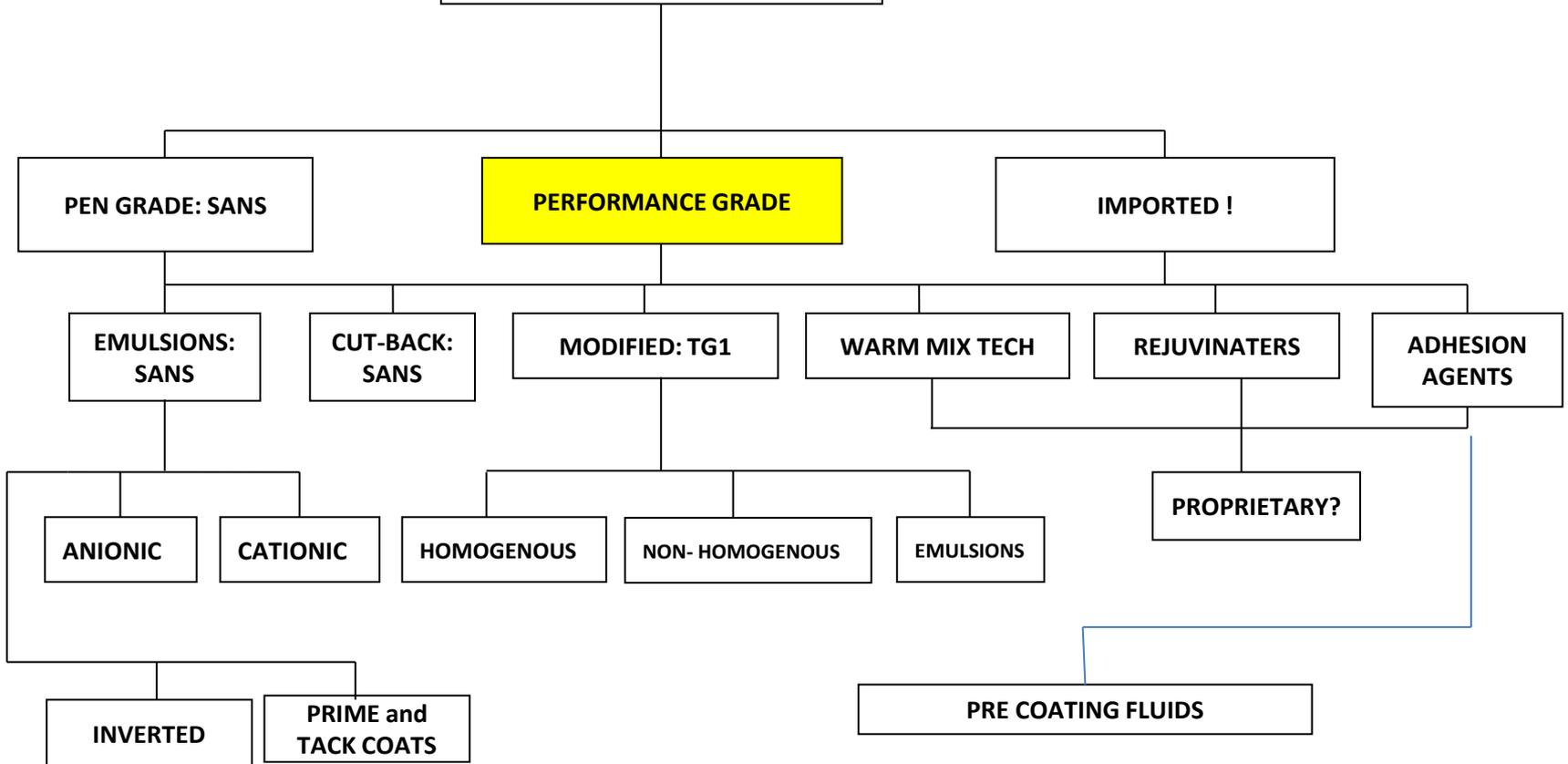
BITUMEN!



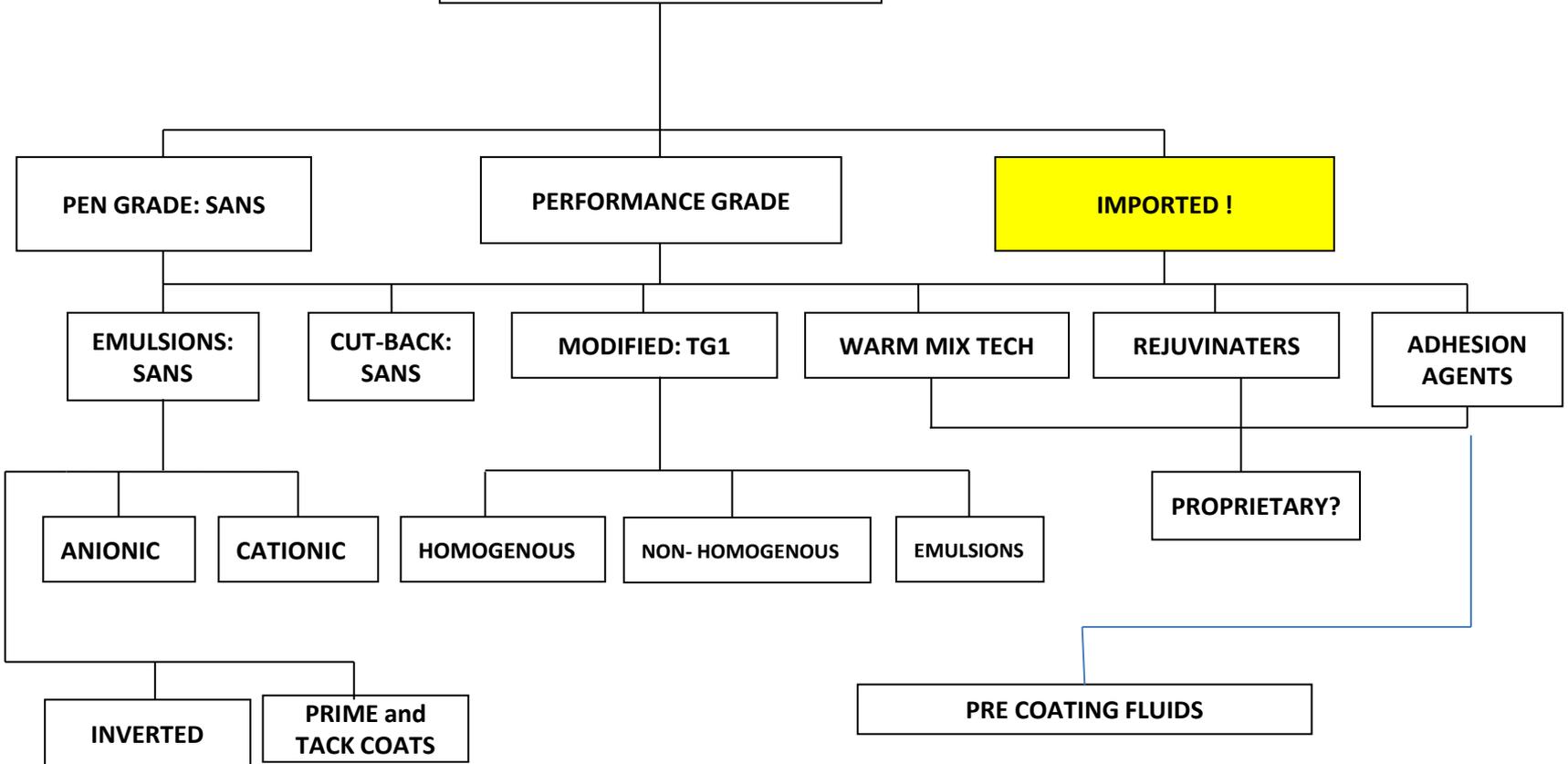
PENETRATION GRADES

SANS 307 NOW SANS 4001 – BT1

BITUMEN!



BITUMEN!



IMPORTED BITUMEN

FOCUSED ONLY ON “TECHNICAL” ISSUES! SUCH AS CHANGES IN PROPERTIES ALONG THE SUPPLY CHAIN ROUTE

- CONTAMINATION
- MECHANICAL MISHAPS ON BOARD
- THERMAL DEGRADATION

TRACEABILITY !

IMPORTED/LOCAL BITUMEN STORAGE

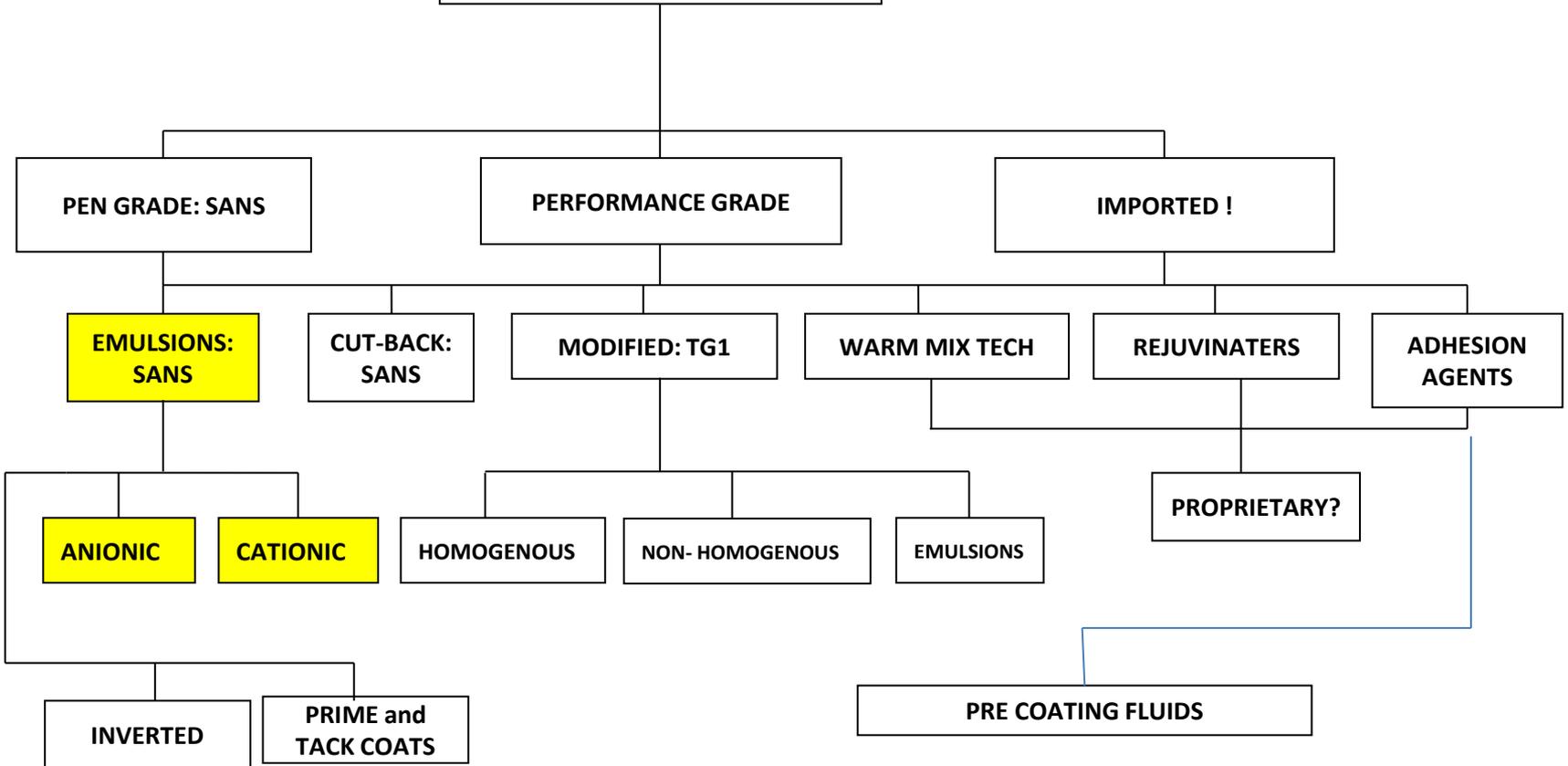
STRATEGIC “TANK FARMS”

LONG TERM STORAGE AND DECANtering PROTOCOLS?

TO BE INCLUDED IN SABITA MANUAL 25:

Code of Practice: Transportation, Off-Loading and Storage of Bituminous Products

BITUMEN!

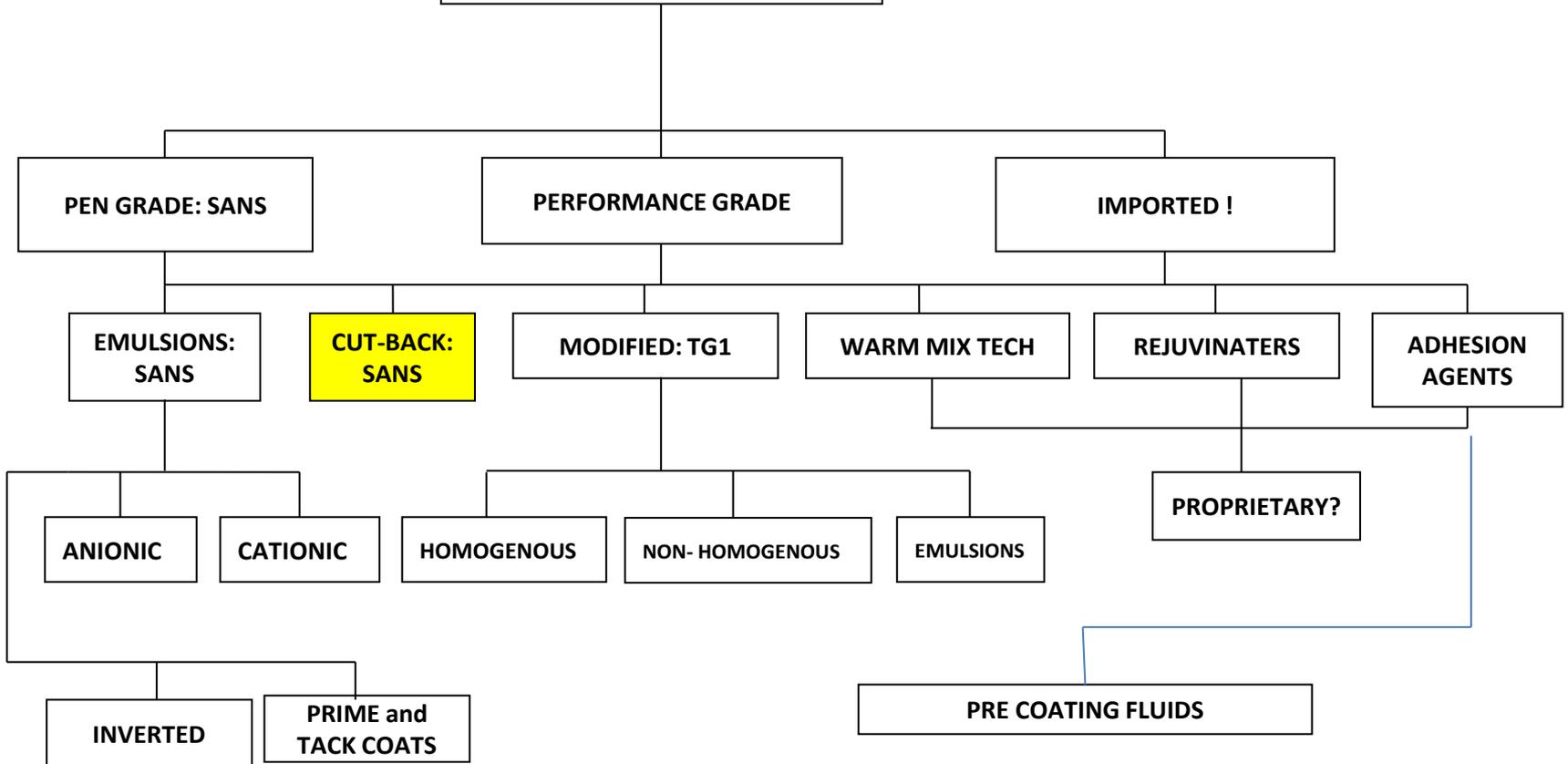


EMULSIONS

- SANS 309:2004 – Anionic Road Emulsions
- SANS 548:2003 – Cationic Road Emulsions
- SANS 1260:2004 – Invert Bitumen Emulsion

After revisions having been completed > 1 year ago –
STILL awaiting SABS approval and publication!!!!

BITUMEN!



CUT-BACK BINDERS

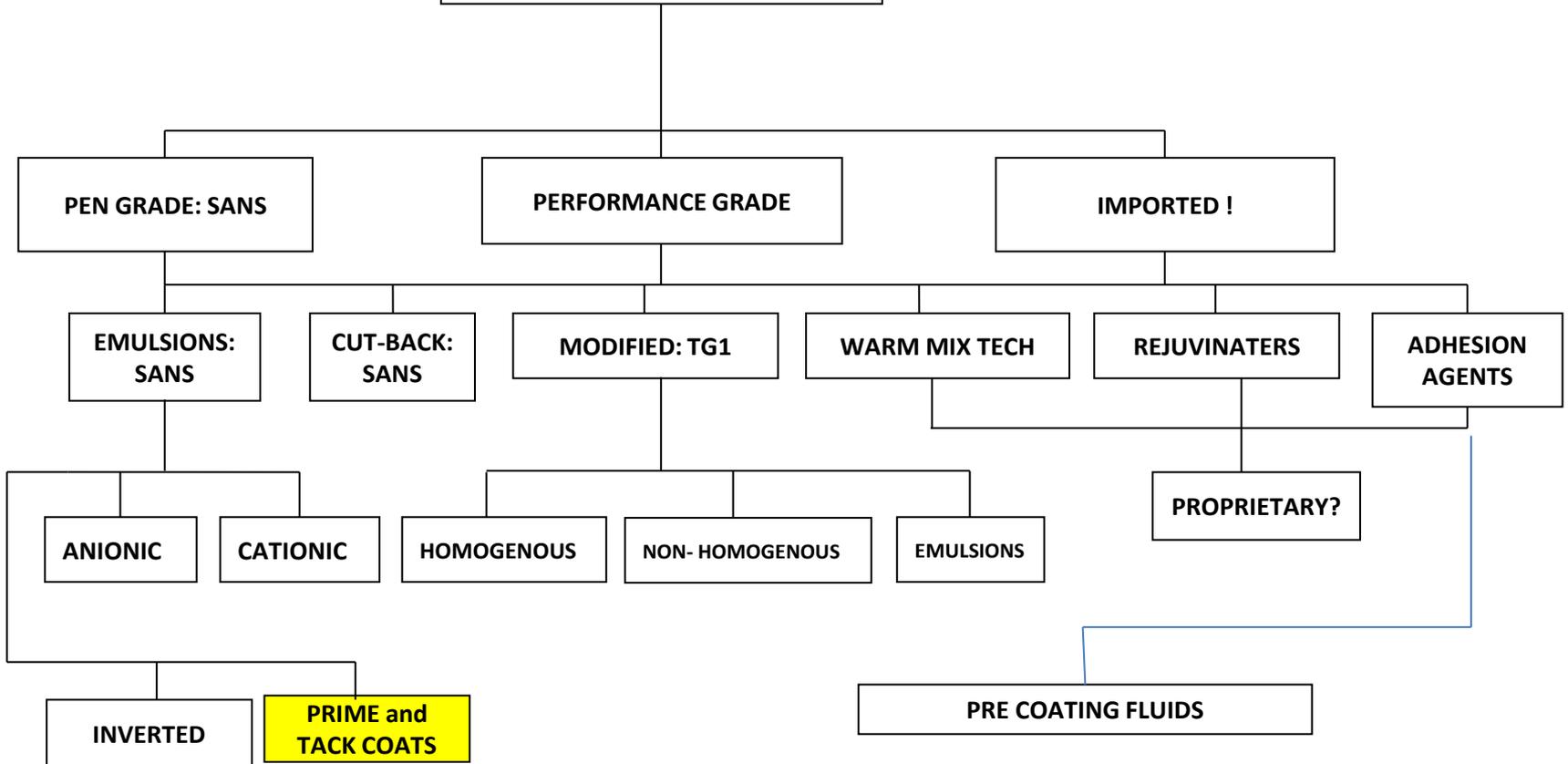
SANS 308 NOW SANS 4001 –BT 2

“CUTTING BACK” OF BINDERS !

“WINTER SEAL” ISSUE

- TERMINAL BLENDING
- “ON SITE” BLENDING
- ASSOCIATED HEALTH, SAFETY AND ENVIRONMENTAL CONCERNS (OBLIGATIONS)
- PROPERTIES OF VARIOUS CUTTERS/OILS

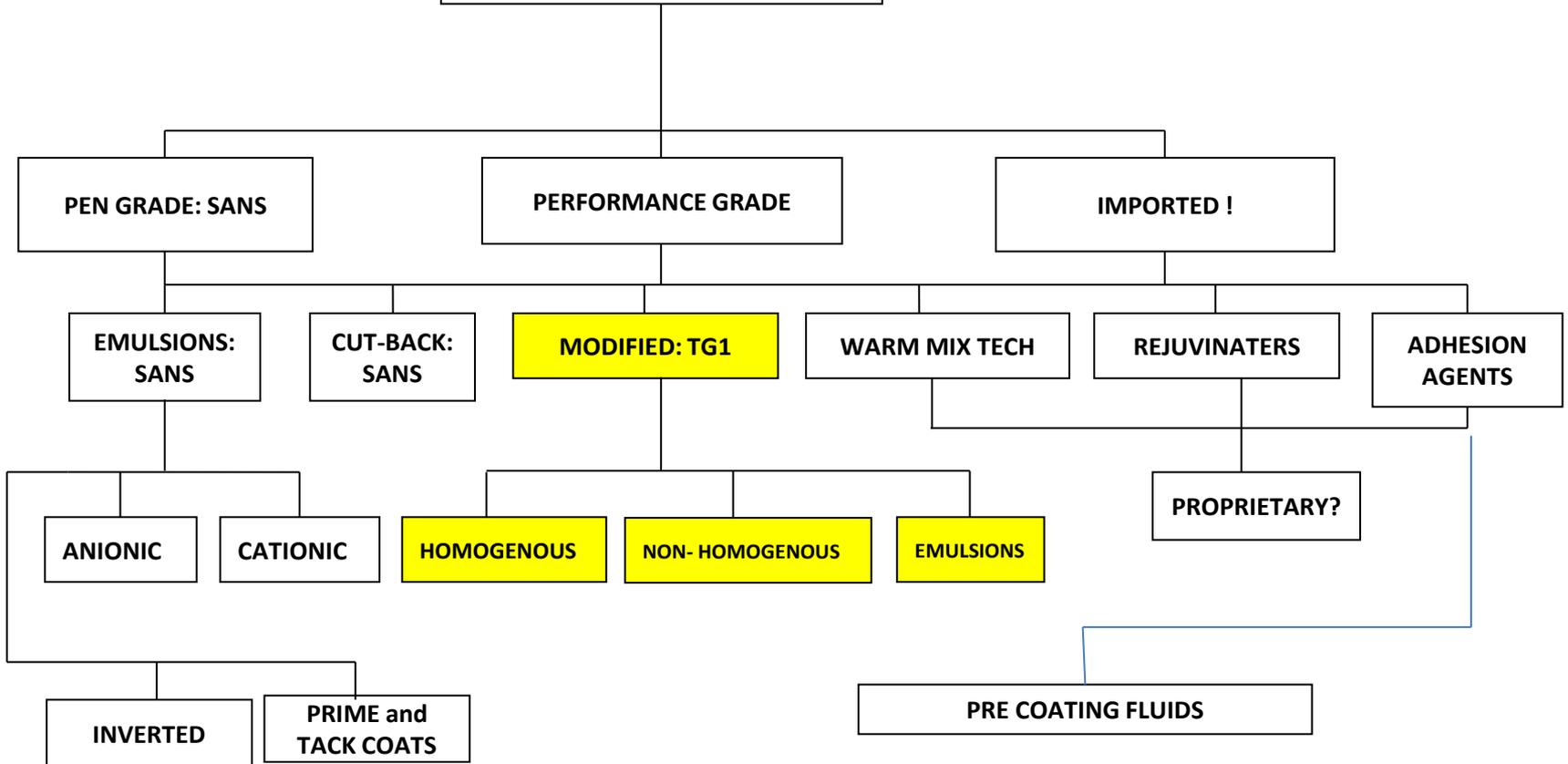
BITUMEN!



PRIMES AND TACK COATS

- ENVIRONMENT “FRIENDLY” PRIMES???
- “TRACKLESS” (TACKLESS) TACK-COATS!

BITUMEN!



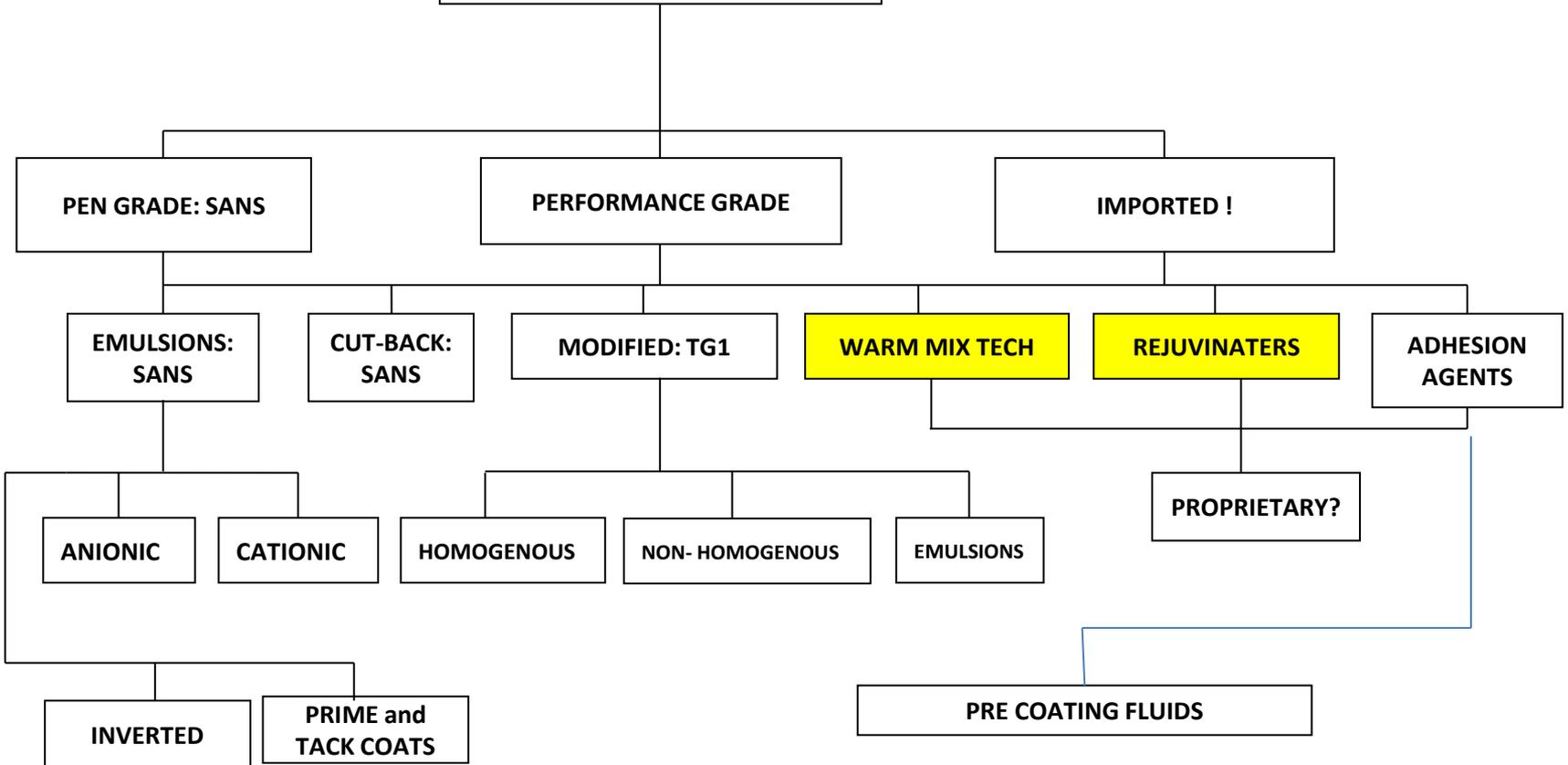
MODIFIED BINDERS: TG1

- ONLY MINOR AMMENDMENTS/CHANGES TO EXISTING PRODUCT REQUIREMENTS
- “NEW GENERATION” BINDERS TO BE INCLUDED
- INCLUSION OF HYBRID BINDERS (COMBINATION OF POLYMERS/AGENTS) PRODUCTS?
- ADDITIONAL BACKGROUND INFORMATION TO BE INCLUDED W.R.T DIFFERENT PRODUCTS AND “MAKE-UP”
- GUIDENCE W.R.T “WHAT IF” SITUATIONS TO BE INCLUDED (E.G NON-CONFORMANCE)

PERFORMANCE GRADING OF MODIFIED BINDERS

- Currently to remain in line with TG 1
- Future PG testing protocols (mandatory “Reporting”) to build up data
- In future totally “polymer/modifier” blind specs?????

BITUMEN!



WARM-MIX TECHNOLOGY

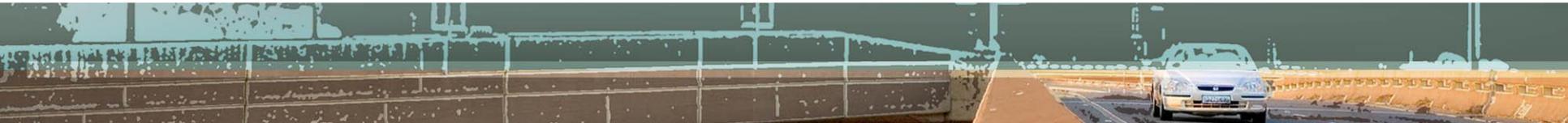
- “STAND ALONE” PRODUCT????
- APPLICABLE ACROSS THE SPECTRUM OF PRODUCTS?
- ENVIRONMENTAL BENEFITS!
- ENGINEERING BENEFITS!
- “DE FACTO” USE IN HIGH RA RECYCLING
- FUTURE “CARBON TAX” IMPLEMENTATION????

REJUVINATORS

- Numerous proprietary products being marketed
- Generic approach required

CONCLUSIONS

- A lot of work is currently underway w.r.t guidelines/specifications of bituminous products.
- Focus on aligning this with other industry pavement and materials design development initiatives currently underway



— FUR —
FROST BITES
CHILL BRAINS
BRUISES
SORE THROAT
BITES OF
ANIMALS
INSECTS AND
REPTILES.

GOOD FOR
MAN AND BEAST

IT GIVES
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IS GOOD
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DESERVES
TO BE
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THE STRONGEST AND BEST LINIMENT KNOWN FOR PAIN AND LAMENESS.

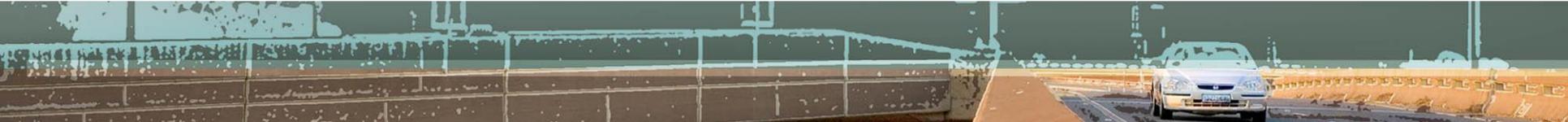
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RHEUMATISM
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SCIATICA
LAME BACK
LUMBAGO
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CORDS
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SPRAINS
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THANK YOU



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