

Surface Talk

Autumn 2011



RECYCLING
in Benoni

P3



WMA
update

P5



QUALITY
cold mix

P6

Delivering quality, *all the time*



“ *Much Asphalt will continue its contribution to the sustainability of the group by focusing on giving customers the best product quality and service in our sector.* ”

There seems to be no happy medium in the construction industry – its either feast or famine. Much Asphalt's 2010 and 2011 order books testify to this. While 2011 will be a tough year, we continue to focus on maintaining a sustainable business and are very positive about the future.

We are cognisant of the negative press surrounding our parent company, Murray & Roberts, in recent months and wish to emphasise that we have full confidence in the ability of the group's leadership to overcome the current challenges. Much Asphalt will continue its contribution to the sustainability of the group by focusing on giving customers the best product quality and service in our sector.

One can lose customer focus during periods of high workload. I am proud to report, however, that a survey conducted late last year showed consistency in product quality and customer support throughout 2010, a year in which we far surpassed all previous records in terms of asphalt output.

Of course there have been some problems, not least the bitumen supply issue that is putting pressure on asphalt production and pushing up prices. During the quieter period expected in 2011 we are working hard to iron out

all issues, including finding short and long term solutions to the bitumen supply constraints, in preparation for an upturn in 2012. We have GFIP Phase 2 and the massive N1 and N2 winlands toll road projects to look forward to, among others.

Our new "green" warm mix asphalt plant is running smoothly in Benoni and we are excited to be leading the South African asphalt industry with technology that will deliver a significant reduction in our carbon footprint. Our technical director, Herman Marais, provides an update on WMA trends in Europe in this issue of *Surface Talk*.

Last but not least, my warmest congratulations to the team, headed by Alec Rippenaar, at Much Asphalt's Central Laboratory in Eerste River for its record achievement of not one non-conformance in its latest SANAS accreditation audit.

Phillip Hechter
Managing director

COVER PICTURE: Semi gap graded wearing course placed on the N2 freeway outside Port Elizabeth (see story below).

N2 resurfacing contract completed



Much Asphalt staff cut testing cores as part of a contract to supply about 48 000 tons of asphalt for the resurfacing of the N2 freeway from Van Stadens River to St Albans interchange between Jeffreys Bay and Port Elizabeth. The 12 month construction contract, awarded to Concor by SANRAL, was completed in December 2010. The material supplied was mainly semi gap graded wearing course, says Much Eastern Cape regional manager Colin Brooks. He adds that another N2 resurfacing contract, between the Coega and Colchester interchanges, will provide further asphalt supply opportunities for the Port Elizabeth based plant this year.

RECYCLING IN BENONI

Much Asphalt Benoni has commissioned mobile crushing and screening equipment valued at R4 million for recycling of road millings and waste material.

The new machines, an impact crusher and a mobile screen, have been put to work on a 300 000 ton stockpile of reclaimed asphalt from various sites, including SANRAL's Gauteng Freeway Improvement Project.

Brian Neville, group technical manager, says the recycling of the stockpile at Benoni makes sound economic and environmental sense.

"We can use about 95% of the recycled material in our various asphalt mixes where recycled asphalt (RA) is included in the project specifications. This, in turn, decreases the virgin raw material input into the plant, saving on the cost of raw materials and reducing the pressure on our natural resources and our carbon footprint," says Brian.

"Reclaiming asphalt material offers financial savings all round in material costs, including asphalt binder, energy costs and total job costs. So everyone benefits, including the tax payer who ultimately pays for the building and maintenance of our roads."



Warm Mix Asphalt (WMA) technology, recently introduced at Much Asphalt Benoni, also allows for higher percentages of recycled material than traditional hot mix asphalt.

The new machines are running between five and six hours a day, achieving an output of around 90 tons per hour.

Much Asphalt started recycling road material four years ago at its Roodepoort plant with the commissioning of the model 2612D Fold 'n Go double-deck screen plant manufactured by Astec Mobile Screens of Illinois, USA. This plant is capable of screening material at a rate of up to 250 tons per hour into two graded fractions and one oversize material.

We plan to eventually have recycling capability at all our 18 plants around the country.

Cenlab scores 100%

Much Asphalt's Central Laboratory in Eerste River, Cape Town, has achieved 100% conformance in its latest SANAS (South African National Accreditation System) quality systems audit, a record for the company and probably for the industry.

Cenlab this year successfully renewed its SANAS accreditation for the fifth time since it was first accredited in 2006 – but this year the audit came back with not a single non-conformance.

Cenlab manager Alec Rippenaar recalls that the initial assessment five years ago came back with 18 non-conformances and the laboratory has steadily reduced this number every year since.

"Our main aim is to add value to our company," says Alec. "Every member of the Cenlab team believes in the quality management system and we try to adhere to the procedures. It's not always easy and we have our fair share of problems, but the encouragement we get from other staff members keeps us going.

"Not getting any non-conformances does not mean there are not any, but we are proud of this achievement and hope to repeat it regularly.

"Our George site laboratory also came through a SABS audit recently without any NCRs and I am proud to say that Cenlab assisted in preparing for that assessment."



Cenlab team members (from left): Jonathan September, Henrique Kleinhans, Morgan Strydom, Alec Rippenaar, Thembakazi Qango, Henry Appollis and Rumarques Brown.

OBITUARY: *Jan Theron Beukes*

Jan Beukes, former CEO of Much Asphalt, passed away in Cape Town in November last year.

In a note to staff, Much Asphalt managing director Phillip Hechter said: "JTB, as we all knew him, epitomised everything that Much Asphalt stood for – commitment, determination and always seeking to uphold and promote our good name. He was a true leader who would not allow anybody to compromise the standards and values he set for the company. Despite being strict in what he expected from his team, he did it in such a way that they all bought into his vision with the same enthusiasm and commitment.

"JTB's legacy goes far beyond Much Asphalt and his contribution to our industry was far reaching to the extent that until his death his views and opinions were still sought and valued by a wide range of people and organisations within our industry and even beyond our borders. JTB was a 'PADMAKER' in the true sense of the word."

Jan was born on 7 March 1941 and grew up in Knysna. He attended Paul Roos High School in Stellenbosch, followed by Stellenbosch University where he obtained an MSc in agriculture.

Jan began his career with Ninham Shand in 1968, joining Much Binder in 1970 as manager at Eerste River, Cape Town. He helped start the company's haulage operation, which grew to include more than 15 bitumen haulage tankers and a fleet of asphalt delivery trucks.

Jan was appointed an alternate director of Much Binder in 1975 and a full director in 1976.

In 1983, under Jan's guidance, Much developed the first wet method bitumen rubber asphalt for trials on the N2 freeway, culminating in the landmark decision to overlay an existing concrete section of the N2 with bitumen rubber asphalt in 1985.

In 1986 Murray and Roberts acquired 100% of the shareholding in Much and for the next three years Jan was involved in establishing a quality assurance programme, building an SABS accredited central laboratory and achieving an ISO listing for three branches. In 1994 he set up two plants in Zambia and successfully completed the Lusaka Southern Freeway amongst other projects.



Jan Beukes during his Much Asphalt days.

Much Asphalt became part of Colas South Africa in 1995 and Jan was appointed CEO of Colas South, responsible for the Eastern and Western Cape and cross border operations.

Jan retired from Colas in 1998, two years before the company shed its binder and paving operations and reverted back to the name Much Asphalt. He continued to contract with the company until as recently as June 2010 as project manager on contracts including the N17, OR Tambo Airport (three times), and the R300 and N1 in Cape Town.

Jan leaves his wife Marlene, children Magriet, Lawrence and Pieter-Melt and their families.

CAPSA '11

Much Asphalt marketing director John Onraët and technical director Herman Marais are playing a central role in organising the upcoming 10th Conference on Asphalt Pavements for Southern Africa (CAPSA).

The theme of this year's conference is **ROADS OF THE FUTURE: Living within the carrying capacity of our planet** and it will take place from 11 to 14 September 2011 at Champagne Sports Resort in KwaZulu-Natal.

John is responsible for the workshops that will run parallel to the conference, while Herman is co-ordinating one of the conference's four main focus areas.

Delegates will explore the commitment and capacity of producers and users of bituminous products to advance

sustainable practice by reducing reliance on non-renewable resources, caring for the environment and assisting in the sound development of society. The conference will help producers and users to meet the challenges of designing and building roads with a minimum ecological footprint. Focus areas will be:

- Reduced energy consumption in the construction of bituminous layers;
- Reducing the impact of road building activities on the environment;
- Designing for extended performance of bituminous layers;



John Onraët

Herman Marais

- Flexible pavement systems for extended life.

Launched in Durban in 1969, CAPSA has grown into one of the most prestigious conferences on road engineering both for the southern African region and the broader international fraternity.

CAPSA was held on a five-yearly basis until the 2004 conference at Sun City. It was then decided to bring the event in line with the four-yearly global calendar of conferences and an interim conference was held in Gaborone, Botswana, in 2007.



WMA BECOMES THE NORM IN EUROPE

A visit by the South African Warm Mix Asphalt Working Group to Europe in the second half of 2010 revealed that WMA is fast becoming the norm in European countries in line with commitments to reduce carbon footprint.

The WMA Working Group comprises representatives of the South African asphalt industry, consultants and various levels of government who have joined forces with a mandate to achieve best global practice in the introduction of large scale WMA production locally.

Herman Marais, technical director of Much Asphalt and a member of the working group, says the European countries visited are well down the line in the development and application of WMA technologies, including higher recycled asphalt (RA) content. "In some countries WMA is already the norm, with HMA only manufactured when specifically requested."

The asphalt industry in France has committed to reduce its CO₂ emissions by 33% by 2020, the Netherlands by 40% in the next five years and Germany by 40% in 2020 and 50% in 2050. This will be achieved through improved efficiencies, together with greater use of high RA mixes and WMA technologies.

Most of the major construction companies in Europe have developed their own patented methodologies, with foam in one form or the other being the main technology used. In Germany, however, Sasobit is extensively used to lower the viscosity of the mix.

Better quality than conventional asphalt mixes is claimed and the WMA mixes frequently incorporate up to 60% RA. A plant in Hamburg, Germany, uses 98% RA.

The WMA Working Group is currently compiling a WMA guideline document for Sabita that will be launched at CAPSA 2011 later this year. A specification for WMA that can be incorporated in project specifications is also being finalised.

In addition to Herman Marais, the following industry representatives were involved in the European visit: Allen Hauptfleisch and Wynand Nortje of National Asphalt; Rob Archibald of Vela VKE; Eric Lathleiff and Krishna Naidoo of eThekweni Municipality; Ian McDonald of the Cape Town City Council; and Kevin Rocher of Roadmac Surfacing.

Much Asphalt's dedicated WMA plant in Benoni has been operating for about a year now and has been favourably received by clients. A high RA content WMA has been specified for a new project at OR Tambo International Airport this year, among others.

Red asphalt to promote safety at Pniel

In addition to conventional black hot mix asphalt, Much Asphalt has supplied red asphalt to demarcate dedicated pedestrian and cycling lanes on 11km of Helshoogte road from the Stellenbosch side of Pniel to the intersection of the R45 to Franschoek in the Western Cape.



Red asphalt promotes safety in Pniel.

The red asphalt gives the impression to motorists that the road is narrowing ahead and serves as a strong visual warning to slow down after the long downhill of Helshoogte pass. It also prompts motorists to look out for pedestrians and cyclists inside the yellow line through the Pniel municipal area, which contains schools and other community services in close proximity to Helshoogte road.

Production of the red asphalt at Much Asphalt's Eerste River plant required adding pre-measured quantities of red oxide to the pugmill and increasing mixing time. The plant, trucks and paving unit had to be thoroughly cleaned out in advance to avoid any traces of black

asphalt from contaminating the red product and spoiling the effect.

The contract was completed at the end of 2010 by Vusela Construction for the Western Cape provincial government. The consultant was Vela VKE.

Meanwhile Much Asphalt has increased its bitumen storage capacity at Eerste River to ensure a constant supply of bitumen in light of the current shortage and is preparing to expand its Eerste River plant to increase output ahead of the N1 and N2 freeway projects due to begin in 2012 and the major Cape Town International Airport runway project in 2013.

"With conditions quieter now than in some years, we have to strike the right balance between cutting costs and ensuring that our customers get value for money at all times," says Garth Miller, Western Cape regional manager.

CONTINUOUS IMPROVEMENT in despatch and distribution

Much Asphalt's despatch teams around the country started the year on a positive note when they gathered on 10 January to brainstorm better customer service.

The 32 employees attending the workshop, facilitated by marketing director John Onraët, came up with a customer service code of practice and a timetable of improvements to be achieved in 2011.

Just some of the measures to be put in place to improve throughflow and safety for customers on our sites include:

- Limiting vehicle numbers at weighbridges by using off-site parking;
- Improving on-site communication with hauliers;
- Implementing safety induction for customers and sub-contract hauliers;
- Hosting driver education meetings;



Re-energising the Much Brand – despatch teams from around the country.

- Applying safety rules for all weighbridges and disciplinary measures for non-compliance;
- Installing speed humps, warning signs and lights;
- Banning unroadworthy trucks from our sites;
- Ensuring that all our weighbridge staff know the consequences of over/under loading.

We will communicate with customers regarding measures to be taken and also welcome any input from you.

Cold mix does well in Eastern Cape and Free State

Much Asphalt continues to play a significant role in the supply of cold mix asphalt, both bulk and bagged, with our best sales for the past year recorded in Bloemfontein and the Eastern Cape.

Clients in both regions testify to the good quality of Much Asphalt's cold mix products, with few returns due to product problems. "A recipe that suits the local aggregate types and workability in all seasons are critical to the success of the product and we

have consistently met customer needs in this respect," says strategic business development director Brian Mchunu.

In the Eastern Cape our cold mix is successfully marketed by Johnson Burwana, a former Much Asphalt

employee and now independent distributor. In the Free State the product is distributed by our Bloemfontein team, which achieves good repeat business through reliable supply and distribution.

Bagged cold mix is used mainly for pothole patching and has several advantages, including extended shelf life compared to hot mix asphalt as well as ease of stocking and transport.

"It is our intention to develop a strong cold mix presence in all regions by forming working relationships with local and provincial road maintenance structures," says Brian.



Bagging of cold mix from stockpile.

Volumes doubled...

But service and quality remained on track

An external survey commissioned late last year has revealed that high levels of activity during 2010 did not negatively impact Much Asphalt's customer service or the quality of our products.

Customers of all sizes were generally happy with the quality of asphalt received from Much. In the Western Cape and Kwazulu-Natal, in particular, virtually no problems were reported.

Smaller customers interviewed without exception indicated that they would buy from Much Asphalt again.

There have been challenges with asphalt supply, but more than 90% of large customers are aware that the bitumen shortage is at the heart of the problem. Some customers commended Much on going the extra mile to accommodate requirements and proactively manage difficult situations.

Comments from customers in some regions around raw materials planning, long queues at our plants and plant breakdowns have been taken seriously

and this year we are focusing on giving all our customers what they want, when they want it.

Routine plant maintenance programmes are now back on track around the country and this is expected to minimise unscheduled breakdowns.

The fact that Much Asphalt kept major customers informed on plant and supply issues via e-mail and SMS was mentioned by several respondents. This successful communication strategy will be expanded to include all customers.

The Much Asphalt brand has remained strong through a period of intense pressure as a result of proactive management action and product quality.

Thank you to all customers who participated in the survey.



30 YEARS OF SERVICE

Much Asphalt managing director Phillip Hechter (right) celebrated his 30th year with the company in 2010. He was handed his long service certificate by financial director Spencer van Eden in December.



Helping Anthea's special family

Anthea lost her husband while pregnant with her third child. Soon after the birth of the baby, she had to take in her sister with her three children due to domestic abuse. Then Anthea opened her home to two street boys. Today she is mother to 11 abused and neglected children ranging from eight months to 14, excluding her own and her sister's children. Although Andrea gets no government funding, she finds the means to give these children the life they deserve. In

December 2010 Much Asphalt head office staff had the privilege of getting to know this wonderful group of people. In an effort spearheaded by creditors clerk Shirley Moth, the team assembled gift boxes containing toiletries, stationery, a few luxuries and a toy and hosted a Christmas lunch for the children. Much also donated a computer to help the older children with projects and research.



CHRISTMAS HAMPERS

Every year the team at Eerste River assembles Christmas hampers for orphans in the Western Cape to assist an initiative led by the Shuttleworth Foundation. In 2010 the ladies at Eerste River added 14 boxes containing clothing, gifts and necessities for school to the some 300 collected by the Foundation.

SEEN AT OUR ANNUAL EERSTE RIVER BRAAI

On Friday 25 March at Dornier Wine Estate, Stellenbosch



Tel: +27 21 900-4400 • Fax: +27 21 900-4468 • E-mail: info@muchasphalt.co.za • Web: www.muchasphalt.co.za
MUCH ASPHALT IS A LEVEL 3 BBBEE CONTRIBUTOR