

ENERSOL welcomes Prasanna De Silva

Our last newsletter broke the news that Gergaynia Shelley retired as general manager. Gergaynia continues with ENERSOL on a part-time basis as Quality Manager.

It is with great pleasure that we introduce our new General Manager, Mr. Prasanna De Silva to Enersol's clients and friends.

Prasanna comes to Enersol following an illustrious career in management in general and in the latex industry in particular. After some years in a staff position with the Sri Lankan army, he became General Manager of Magelle Trading in 1982, and considerably improved its profitability. He then took over as Director of Coirtex and revived it from being a moribund company to be a major supplier of coir products to Europe. He then spent 5 years as General Manager of Lanka Walltile, a company with an extensive export market, before he was recruited by Ansell in 1995 to manage its glove plant in Sri Lanka.

In 2001, Prasanna was transferred by Ansell to be Vice-President of the Personal Healthcare Division, and was located at its Suretex condom plant located in Surat Thani, Thailand. Simultaneously, he had the responsibility for the Ansell condom plants in Bangalore and Aurangabad India as well as the packing plant in Pietermaritzburg, South Africa. His family moved to Australia in that period, as a result of the security situation in Sri Lanka. In 2004, Prasanna resigned from Ansell and moved to Australia to be with his Family.



He had been managing a small company in Australia prior to joining Enersol. An accountant by profession, Prasanna has also trained in six-sigma and other management techniques.

Overall, his skills are ideally suited to Enersol's range of activities and all our clients and suppliers can be assured of the most knowledgeable and professional assistance from Prasanna.

I am sure that Prasanna will bring valuable skills to Enersol, and that the company's offerings to clients will be considerably enhanced as a result. Please contact Prasanna for all matters previously handled by Gergaynia. His E-mail address is pdesilva@enersol.com.au and phone fax and postal contacts are as for all other Enersol Staff.

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B.S. Lee leaves Unidus Co Ltd

Mr Bong Sam Lee, Managing Director and Export Marketing Manager of Unidus, the manufacturer of condoms in Korea, has recently left the company.

Mr Lee had been a major part of Unidus (formerly Seohung) for 22 years, and over that period Unidus established itself as a leading supplier in the international tender market. Mr Lee is setting up his own trading company.

Most recently, Unidus received a contract from USAID to supply 300 million condoms a year for three years.

Mouse problems in Windows XP

In volume 1 of our newsletter this year we announced a fix for erratic mouse behaviour. The problem occurs with Enersol inflation systems and both editions of Windows XP.

Please contact Lisa Henretty via email lhenretty@enersol.com.au for assistance if your computer exhibits this behaviour. This modification is available free of charge to ENERSOL's maintenance clients.

Condom Shelf Life, Dr John Gerofi

Shelf life of condoms is a matter of continuing concern. Major purchasing agencies check on quality by using acceptance testing of all lots purchased. But there is no known way of predicting shelf life from a laboratory test. The latest issue of ISO 4074 requires a real time shelf life study, but this can only be a type test. Manufacturers are supposed to re-do the study if they make "significant" changes to the formulation or process parameters. But many changes that manufacturers claim to be minor (e.g. changes in sulphur or antioxidant levels) may have significant effects on shelf life, and real time studies will only show this up after a considerable time.

Recent studies have confirmed that in general, aging at 50C mimics more closely what happens in real life than aging at 70C. This means that useful indicative results can be obtained in 3 to 6 months, rather than over several years.

Many aid agencies buy condoms in very large quantities, as and when funds are available. As a result, large stocks may be kept in-country, at national, regional and district warehouses. Until the publication of ISO 4074:2002, many manufacturers assigned a 5 year shelf life to their product because it was standard industry practice. While this 5 years (or even longer) may apply in temperate climates, it has become clear that condom physical properties decay much faster in hot climates, and that shorter shelf lives may apply to some makes of condom.

Questions have been raised about deterioration during shipping, and experiments at Enersol have shown that temperatures in shipping containers holding condoms can reach about 12C above the outside temperature. It is unlikely that daily heating, even to 50C, over the period of a sea voyage (a few weeks), would seriously degrade condoms. But long periods on hot wharves, waiting for transshipment or customs clearance, could shorten the shelf life somewhat.

Rubber chemistry is complex, and it is unlikely that a full understanding of all the parameters in condom shelf life will be available in the immediate future. Manufacturers certainly need to study their products' shelf lives under various conditions.

The widely-accepted theory of rates of chemical reaction is the Arrhenius equation, which, when applied to typical organic reactions, suggests that the rate should increase by a factor of 2 to 3 for every 10C rise in temperature. Thus a condom with a 5 year shelf life if stored at 20C could have a shelf life between 1.7 and 2.5 years at 30C.

In practice, the decay of condoms is more complex than the Arrhenius equation predicts. Although some call this non-Arrhenius behaviour, it is likely that there are two or more reactions in progress, both obeying the Arrhenius equation, each with its own rate constant and activation energy. Unless these values are known, the presence of more than one reaction makes it very difficult to use the equation to predict shelf life.

Those who operate condom procurement and distribution systems must make pragmatic decisions pending more scientific information. They need a good understanding of the conditions under which their products are stored, and make allowances for that. Unfortunately the standard did not allow explicitly for shelf life to be climate-dependent. The thing is to arrange for orderly timing of deliveries, and to avoid over-stocking.

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RAPRA acquired by Smithers Group

Smithers Group Inc has just acquired a large standing in the United Kingdom and European markets through its acquisition of RAPRA technology Ltd.

RAPRA, a company with a similar portfolio but solidly based in the UK and Europe provides Smithers with a strong foothold in these areas.

RAPRA went into receivership in March and has become a subsidiary of Smithers group. Mr. Michael Hochschwender, CEO and President of Smithers Group says executives will be working closely with the existing staff at RAPRA to ensure a good transition.

New ASTM latex classification

ASTM has just defined a new category of natural rubber latex, with less than 200 micrograms of protein per gram of dry rubber.

Yulex Corp., a Californian producer of rubber latex, will benefit because it is the licensee for Guayule latex, which is particularly low in known allergenic proteins.

Managing Director Jeffrey Martin said their concern was that Yulex would appear on the same classification as tropical latex, which has no standards.

"We hope that customers will look at this standard and react with confidence toward Yulex products."

Condom Shelf Life (continued)

This not only reduces the risk of deterioration, but also reduces the amount of warehouse space needed, and allows the manufacturer to produce the product over a longer period. Warehousing conditions themselves also require attention, to minimise the potential for deterioration in storage.

Attention to delays in shipping and customs clearance is also needed. One can then seek strategies to minimise the risk of product damage prior to delivery. In countries where parts of the civil service are very inefficient and/or corrupt, the identification of a problem will not necessarily lead to an immediate solution!

Inadequate attention to the supply chain in terms of order quantities, transport conditions and storage conditions can (and does) result in wastage of condoms which must be destroyed rather than being used, and/or in period of unavailability.

South Africa; Mr. Zuma acquitted

South Africa is amongst the highest rates of HIV in Africa. President Mbeki's debate over AIDS as a disease or a consequence of poverty delayed HIV education in Africa for years.

Once resolved, South Africa was becoming more HIV aware until former deputy president Jacob Zuma became headline news for charges of rape and for giving the impression that washing his body could clean the HIV virus.

Mr. Zuma was acquitted on charges of rape in May; the judge determining sex was consensual between Mr. Zuma and the HIV-positive family friend. The judge was adamant that misleading the public is almost as criminal as the charge of rape.

"I apologize. I have no doubt about it and it (was) a mistake. The war against AIDS -- I will stand for it and I will continue to preach, even using myself as an example. We need to fight HIV and AIDS because it is a dangerous thing," he told the SABC public broadcaster.

"The question of when I am going to resume (duties as deputy president of the African National Congress) ... I took a decision (to suspend myself) for the duration of the case and the case is over. Therefore I am back," Zuma added.

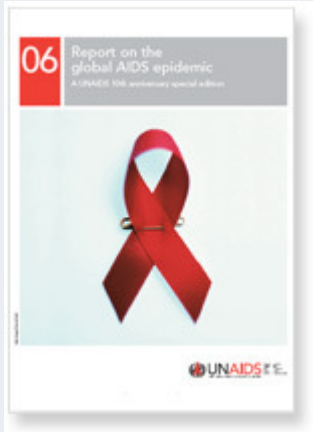
CPR and Vulkan

Vulkan recently signed a joint venture agreement with German company CPR, which has been globally involved in condom manufacturing for several decades.

The new company, called VULKAN Intim Brands, was set up by both partners. This joint enterprise will take over from Vulkan all activities associated with condom manufacturing, including employees, trade marks and other operational assets.

"We are going focus our efforts on quality and strong Primeros brand building, which has a reasonable starting position on the Czech and Slovak markets," executive manager Roman Kocian said.

Vulkan a.s. is the oldest European condom manufacturer (since 1909) and owner of Primeros brand with the largest market share in volume terms in the Czech Republic. CPR GmbH is the second largest condom manufacturer in Germany. Further, approximately one billion condoms annually are manufactured world-wide on CPR-made production lines, which equates to 8% of the world market. CPR is traditionally an export oriented company with the Sico condom brand being the leader on the market in Mexico and no. two seller in Russia.



“The only acceptable goal for the world is to stop and, ultimately, put an end to AIDS. Only then will we achieve the Millennium Development Goals and succeed in our efforts to build a humane, healthy and equitable world.”

Kofi Annan

Your contributions are welcome...

ENERSOL's International Newsletter is produced by ENERSOL Consulting Engineers as a service to the latex industry. If you have any news or views you would like to contribute please send them to us by e-mail to jgerofi@enersol.com.au or by fax +612 9552 1709

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38.6m people with AIDS – More funding required to fight epidemic – UNAIDS

UNAIDS recently released their 2006 report, revealing that new infections appear to have stabilized for the first time in 25 years. They estimate that 38.6m people are living with HIV worldwide. The report also highlighted that 4.1m people were newly infected during 2005 and approximately 2.8m people died of AIDS related illness during the year.

UNAIDS also called for world leaders to fulfill their commitment made at the G8 summit, to achieve universal access to HIV treatment by 2010. Many voluntary organisations managing funding for AIDS, reiterated the need to do more to increase access to anti-retroviral treatments, good sex education and condoms, which is vital to the reduction of spread of HIV.

United Nations General Secretary Kofi Annan has criticized the lack of progress combating HIV. He said the vast majority of countries had fallen “distressingly” short of meeting their targets.

The 2006 report on the Global AIDS epidemic contains the most comprehensive set of data on the country response and the AIDS epidemic ever compiled. 126 countries submitted HIV reports to enable UNAIDS compile the report.

The report found that some countries doing well in treating people with HIV, but poorly on HIV prevention efforts while for the others the opposite was true. The report reiterated the need for improved planning, sustained leadership and reliable long-term funding – with current levels of spending still below what was required.

Sub-Saharan Africa remains the epicenter, with two-thirds of all people living with HIV coming from the region. 2m People died of AIDS in the region last year and there were 2.7m new infections.

However, the numbers in Eastern Europe and Asia continues to rise. India, Ukraine and the Russian Federation are particularly badly affected.

India overtook South Africa as the world's worst-affected country in terms of the absolute number of people with HIV – although not as a proportion of the population.

Following are the key findings:

- ▶ Important progress has been made since the 2001 special session. Yet there is extraordinary diversity in the response to HIV between countries and regions.
- ▶ In most countries, a strong foundation now exists on which to build an effective HIV response, with increasing political commitment and partner coordination at the country level. However, there are still significant weaknesses in the response to the HIV epidemic.
- ▶ A quarter century into the epidemic, the global AIDS response stands at a crossroads.
- ▶ Resource mobilization is one of the four specified targets the global community achieved in 2005. Financial responses to AIDS including domestic public expenditure from governments have increased significantly since 2001. US\$8.3 billion was spent on the epidemic against a global target of US\$7.0-10.0 billion for 2005. Existing pledges, commitments and trends suggest the rate of increase may be declining and that available funds will be US\$8.9billion in 2006 and US\$10.0 billion in 2007.
- ▶ Given the rapid spread of HIV the available funding is impressive yet falls short of the estimated requirements of US\$14.9 billion in 2006, US\$18.1 billion in 2007 and US\$20.3 billion in 2008. UNAIDS has urged donors to significantly increase financing for AIDS by strengthening and fulfilling the existing commitments supporting the global fund and other innovative financing mechanisms.