

ASIAN SPECIALTY CHEMICALS NEWSLETTER

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A quarterly newsletter of developments in the chemicals sector

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AUSTRALIA

Orica announced that ammonium nitrate production capacity is being increased by approximately 25,000tpa to 300,000 tpa costing around \$13.5m to be completed by March 2005 and follows a 15% upgrade of the plant to 275,000 tpa in 2003. Work is underway to increase production of ammonium nitrate by 40% at Kooragang Island, near Newcastle, for a cost of \$50 million, expected for completion by end of 2004. (March 1, 2004)

INTRODUCTION

We hope you find the *Asian Specialty Chemicals Newsletter* informative.

BDA is a corporate finance advisory firm that helps multinational companies identify and execute acquisitions, JVs and divestments in Asia. We focus on the specialty chemicals sector and are well placed to advise our clients.

If you think that BDA's services may be useful to you, please contact us at any one of our offices or email me at erellie@bdallc.com. Contact details for our offices are at the back of this newsletter. We look forward to speaking with you in the future.

Euan Rellie
Managing Director

CHINA/HK

Ciba Specialty Chemicals agreed to spend about \$580m to acquire paper chemicals specialist **Raisio Chemicals**. The Unit is the chemicals arm of Finnish pulp and paper producer **Raisio Group**. For Ciba, the acquisition helps fulfill a goal of gaining a stronger geographical reach in the paper chemicals sector. It has been working to broaden its own activities in Asia. Raisio has just recently opened latex binder and specialty chemical plants in China. (March 29, 2004)

Degussa is selling its \$6m per year thiourea dioxide business to **Wego Chemical & Mineral Corp**. The sale does not include assets. Degussa will end production in Weissenstein, Austria, by mid-year; Wego will transfer production and all intellectual property to its site in Qingzhou, China. Degussa says the closure decision was prompted by

changes in the market for the reducing agent and by the high cost of production. (March 18, 2004)

Juling Yan Plastics Co, a PP compounding JV between **Mitsubishi Chemical**, **Beijing Yanshan Petrochemical** and **Toyota Motor's** trading division, doubled its capacity last year to 10,000tpa and is planning to further increase capacity to 20,000tpa through the addition of one new extruder of around 3,000tpa. Demand for block co-polymer grades for fascia, bumper and door-part automobile applications is growing by 40% in China. (March 8, 2004)

LG Chemical expects to decide within the first half of this year whether it will build its 300,000tpa ethylene dichloride (EDC) plant in Tianjin, or other parts of China. Although an industry observer said Fujian was a more likely choice, as there was the problem of ethylene unavailability in Tianjin. The South Korean major cancelled its plan to build an ethylene dichloride (EDC) plant in Gladstone, Queensland, Australia because of concerns over growing labor, environmental and foreign-exchange costs. LG is currently producing 340,000tpa of polyvinyl chloride (PVC) in Tianjin. (March 1, 2004)

Mitsui Chemicals is launching out on investment in purified terephthalic acid (PTA) in China. The firm has established a PTA manufacturing and marketing entity called **Mitsui Chemicals (Zhangjiagang) Co.**, wholly owned by Mitsui Chemicals, in the **Zhang Jia Gang Free Trade Zone (FTZ)** in Jiangsu Province, decided to construct a 600,000-t/y facility based on its own process technology. If all goes as planned, start-up of the new facility is likely in 2007 or 2008. (March 1, 2004)

Mitsui Chemicals expects to decide on its integrated phenol-bisphenol A (BPA) project in China, possibly in Shanghai, in one or two months' time. The project is expected to produce 200,000-250,000tpa of phenol and 70,000-100,000tpa of BPA. (March 8, 2004)

Mitsubishi Rayon Co (MRC) is planning a second project in Asia and reviving plans for a US project,

in a bid to become the world's largest producer of methyl methacrylate (MMA). The second Asian project, which could be located in China, Thailand or Taiwan, is slated for startup in 2007-08. The capacity has yet to be decided, but it would be of at least 90,000-100,000tpa, which is currently world scale. China is a serious contender for the second Asian project as it has the fastest-growing market. It is also home to MRC's first Asian project – a 90,000-100,000tpa plant in Guangdong, China, which is planned for startup in late 2005 or early 2006. The company expects to receive the Chinese government's approval for the Guangdong project next month. Nearly 60,000tpa of MMA from the company's first MMA project would be used solely to feed a 40,000tpa polymethyl methacrylate (PMMA) plant in Nantong, China, and a 20,000tpa PMMA sheet plant that is under construction, also in Nantong. (March 1, 2004)

Nan Ya Plastic's polyethylene terephthalate (PET)-polyester filament project in Kunshan, Jiangsu, China, has been pushed back to early 2006. Design work is under way and no reason was given for the delay. The original project was to produce 50,000tpa of polyester staple fiber (PSF) and 100,000tpa of polyester chips. Half of the polyester chips output would be used to feed a 50,000tpa polyester filament plant, which would produce 25,000tpa of drawn textured yarn and the same amount of partially oriented yarn. Nan Ya also has a joint-venture project in Vietnam that will produce 120,000tpa of PSF and 40,000tpa of polyester yarn by end-2004. (March 1, 2004)

Qingdao Kailian (Group) Corp has entered into a JV with **LG Aromatics** for a world scale benzene, toluene and xylenes (BTX)-paraxylene (PX) project in Qingdao, Shandong, China. The companies plan to import naphtha feedstock to feed a reformer. A port will be built to facilitate the import of naphtha. The Chinese company is investing in the project through its subsidiary, **Red Star Chemical**, which owns 10% of the JV, **Qingdao Lidong Chemical Co.** and **LG Aromatics** holds the remaining 90% stake. Lidong's project will produce 700,000tpa of PX, 200,000tpa of benzene and 60,000tpa of toluene. Lidong is aiming to achieve

commercial production in July 2006. (March 1, 2004)

Shanghai Chlor-Alkali Chemical (SCAC) has pushed back the start-up of its integrated 280,000tpa ethylene dichloride (EDC) and chlor-alkali project to H1 2006. The JV project, which is located in the Shanghai Chemical Industry Park in Caojing, China, was originally due to start up in June 2005, to coincide with the start-up of BP's JV cracker project. The cracker, which is being built, will provide the ethylene feedstock. The reason for the delay was not immediately known, but SCAC and its partners now plan to complete construction by end-2005. SCAC has formed a joint-venture company, **Shanghai Tianyuan Huasheng Co**, for the project with Shanghai **Tianyuan Group** and **Shanghai Coking and Chemicals Co (SCCC)**. Tianyuan is leading the project with a 51% stake, while SCAC and SCCC own 44% and 5% stakes, respectively. SCAC, Tianyuan and SCCC are part of the **Shanghai Huayi Group**. (March 1, 2004).

Shinkong Synthetic Fibres plans to build a 10,000tpa amorphous-polyethylene terephthalate sheet unit in Huachun, Hangzhou, Zhejiang, China. Approval from the government is slated to come on stream at the end of this year or in early 2005. The Taiwanese major is also constructing a 1500tpa/month (18,000tpa) engineering plastics unit at the same site. The facility, which will produce compounds of polybutylene terephthalate and glass fibre, is due to start up in March or April. Shinkong also produces 100tpa/day (330,000tpa) of partially oriented yarn and 27 600tpa of drawn twisted yarn in Huachun. (March 1, 2004)

Showa Denko is mulling a new world scale plant for vinyl acetate monomer (VAM) in Japan. The company also hopes to make a decision on its greenfield ethyl acetate (EA) project in China by the end of this year. The new VAM plant was being considered as a replacement for a 120,000tpa plant in Oita, Japan. The new plant is likely to have a world scale capacity of 300,000tpa. The company is also planning to have a new EA plant by 2006. Showa is evaluating a world scale vinyl acetate monomer (EA) project with a capacity of 100,000-

150,000tpa in China. It is also evaluating two possible sites for the project – Shanghai and Guangdong. The China project would be based on the ethylene route that is used at Showa Denko's plant in Indonesia. Besides the project in China, expansions in Indonesia or Japan are also being evaluated. (March 1, 2004)

Thai Plastics and Chemicals (TPC) is exploring opportunities for building a polyvinyl chloride (PVC) facility or integrating it with a vinyl chloride monomer (VCM) unit in China. The company would decide whether to produce just PVC or VCM and PVC depending on the availability of feedstocks. The PVC unit, if built, would have a capacity of 100,000-120,000tpa, while the VCM unit could produce 300,000-400,000tpa. Surplus VCM could be exported to TPC's facilities outside of China. (February 16, 2004)

Yunnan Yuntianhua Co has started building a 100,000tpa formaldehyde unit in Kunming, Yunnan, China. The formaldehyde produced would feed a planned polyoxymethylene (POM) unit located at the same site. The company had decided to build a 20,000tpa POM unit and to de-bottleneck its 10,000tpa POM unit by 2,000tpa. The de-bottlenecking work will take place this month; the expanded plant will be ready for startup in April. Methanol feedstock for the formaldehyde unit will be bought locally. The company did not want to build a methanol unit as there is no readily available natural-gas supply in Yunnan and the cost of transporting coal is too high. (March 1, 2004)

INDIA

Haldia Petrochemicals Ltd's (HPL's) plan to expand the nameplate capacity of its 466,000tpa cracker to 520,000tpa has been approved by its creditors. The Rs1.32bn (US\$29.2m) project in Haldia, West Bengal, India, is scheduled to come on stream in Q2 2005. HPL now produces 233,000tpa of propylene, 74 500tpa of butadiene

and 75 500tpa of benzene. Its downstream units include a 245,000tpa polypropylene unit, a 220,000tpa high-density polyethylene (hdPE) unit and a 250,000tpa linear-low density PE/hdPE unit. (March 15, 2004)

Indo Rama Synthetics' planned polyester plant at Butibori near Nagpur in Maharashtra, India, will now have a capacity of 280,000tpa instead of the original 175,000tpa. The project's startup has also been pushed back to September 2005 from mid-2004. The new plant will now produce 140,000tpa each of polyester staple fiber (PSF) and partially oriented yarn (POY). The original plan was for it to produce 145,000tpa of PSF and 30,000tpa of textile-grade polyester chips. Indo Rama had decided to pursue a larger project not only because of anticipated bullish demand for PSF and POY in Asia, but also to take advantage of India's favorable customs duty for imported plant and machinery. (February 9, 2004)

Indian Oil Corporation (IOC) has chosen Panipat in Haryana, India, as the location for its proposed 350,000-400,000tpa polypropylene (PP) unit. The project would source propylene feedstock from IOC's refineries. Part of the propylene feedstock could also come from a refinery expansion at IOC's subsidiary, **Chennai Petroleum Corp.** The expansion, when completed at the end of next month, will increase the refinery's propylene capacity from 17,000tpa to 80,000-90,000tpa. (February 9, 2004)

Reliance Industry's planned takeover of **National Organic Chemicals Industries (Nocil's)** petrochemicals and plastics divisions would complement Reliance's existing product slate. A takeover by Reliance would be also enabling Nocil to restart the petrochemical complex, which would create new jobs for the residents. Nocil expects the process of securing approvals to be completed in four to six months. (February 2, 2004)

JAPAN

Japan Polypropylene (JPP) and **Japan Polyethylene (JPE)** will announce final decisions on their investment strategies this autumn that will cover scrap-and-build programs and, possibly, construction of an overseas cracker complex with one of their parent companies. JPP's capacity comprises 100,000tpa at Mizushima, 78,000tpa at Yokkaichi, 227,000tpa at Kawasaki, 323,000tpa at Chiba and 346,000tpa at Kashima. Currently, JPP has a strong market position: it has a 38% share of the domestic market and a 44% share of the key PP automotive market. JPP's strategy is to bolster its compounding capacities overseas to supply re-located Japanese automakers. (March 8, 2004)

Zeon Corp expects to double the capacity of its 5,000tpa cylo-olefin polymer plant at Mizushima, Japan, in April or May. The additional volumes will be used to make optical-film and light-guide diffusion plates at Takoka, Japan. Zeon has already doubled the capacity of its 5m m2 plant at Takoka, to meet fast-growing demand. These light-guide diffusion plates will be used in large LCDs for TVs. Zeon will initially market the product in Japan, South Korea and Taiwan. (March 8, 2004)

Sumitomo Electric Industries and **Fujitsu** expect their compound-semiconductor JV to achieve sales of Yen100bn (US\$946m) by 2006. The 50/50 JV is scheduled to start operations in April. The new JV will be involved in a complete range of activities, from research and development to production and sales. The new company would seek a strong position in the global market for telecommunication devices, as well as in digital home appliances and IP (Internet protocol) networking devices. (February 16, 2004)

SunAllomer is undergoing a capacity-expansion program that will focus initially on de-bottlenecking

of its plants. This year, the PP producer will raise the capacity of its 60,000tpa Oita facility by 30%. The capacity of SunAllomer's second plant at Oita has already been gradually increased to 120,000tpa from 100,000tpa. The next step will be to raise its capacity to 150,000tpa. And at Kawasaki, the company's other production site, capacity is just below 120,000tpa. From mid-2004, capacity will be raised to significantly higher than this number. The de-bottlenecking program will be completed in the next 2-3 years, after which a further investment could be evaluated. (March 22, 2004)

Chisso and **CI Kasei** have formed a strategic sales-and-marketing alliance in response to tough competition and the declining demand for agricultural film. The alliance was formed to avoid direct competition with each other in the agricultural-film business. The companies would use each other's production facilities and contract producers, as well as purchase materials jointly and sell each other's products. They would also exchange marketing information and conduct research together. The alliance would also allow the companies to restructure their operations. (March 15, 2004)

KOREA

LG Chemical and **Polyclad Laminates** have agreed to form a strategic alliance under which LG Chemical will produce, market and sell Polyclad's printed circuit boards (PCBs) and related products in South Korea. All materials will be produced at Polyclad's plant in Dalian, China. This alliance will allow LG Chemical to supply high-quality PCBs to its customers, and it also opened door to further tie-ups with Polyclad in other areas. (March 1, 2004)

To submit stories to the *Asian Specialty Chemicals* Newsletter, please contact Shan Yue in New York on (212) 265-5300 or email to syue@bdallc.com.

MALAYSIA

Namhae Chemicals is in talks with **Asean Bintulu Fertiliser (ABF)**, which is majority-owned by **Petronas**, on a JV for its melamine-relocation project. Due to the high cost of urea feedstock in Korea, Namhae is planning to relocate its 15,000tpa melamine unit from Yeochun, South Korea, to ABF's site in Bintulu, Sarawak, East Malaysia, where urea will be produced at a more competitive rate. (March 1, 2004)

TAIWAN

Covion Organic Semiconductors and **GrandTrend** have formed a strategic alliance through which the latter will market and sell Covion's organic light-emitting diode (OLED) materials in Taiwan. GrandTrend would provide local agency services for Taiwan-based customers that were already using Covion's OLED materials and technologies. GrandTrend would also develop new business opportunities across all three OLED technologies. Covion is already investigating setting up development relationships with display companies in China. So far, at least six companies have shown interest in OLED development. And GrandTrend's Shanghai office could also provide a logical stepping-stone into China for Covion. (March 22, 2004)

Shinkong Synthetic Fibres has reduced the capacity of its originally planned 18,000tpa polyethylene terephthalate (PET) film-grade project in Taoyuan, Taiwan, to 12,000tpa. The company has also decided to produce PET film for electrical and electronics purposes instead of for packaging because there is more demand for the former. The NT\$2bn (US\$60.5m) project, which would take 18 months to complete, was targeted for startup in

mid-2005. Shinkong owns an 1100tpa/day (363,000tpa) polymerisation unit at the site. (March 1, 2004)

Mitsubishi Rayon Co (MRC) is planning a second project in Asia and reviving plans for a US project, in a bid to become the world's largest producer of methyl methacrylate (MMA). Taiwan is one of the candidates being evaluated for the second Asian project as MRC has some big customers in the country. C4s should be available for the project, possibly from **Formosa Petrochemicals**. The second Asian project is slated for startup in 2007-08. The capacity has yet to be decided, but it would be of at least 90,000-100,000tpa, which is currently world scale. (March 1, 2004)

THAILAND

Thai Plastics and Chemicals (TPC) is conducting a feasibility study on adding a polyvinyl chloride (PVC) compounding line at its site in Mab Ta Phut, Thailand. The company is monitoring the domestic market and expects to decide whether or not to build the line in April. TPC currently produces 45,000-50,000tpa of PVC compounding in ten lines. The new line, if built, would have a capacity of 3,000-5,000tpa. The site can start up as early as Q2 2005. (February 16, 2004)

PTT Pcl will hold a 48% stake in its phenol project, in which its affiliates **National Petrochemical Co (NPC)** and **Aromatics (Thailand) Pcl (ATC)** will each take 26%. The companies are expected to set up a new firm for the project in April. **Thai Olefins Co (TOC)**, another PTT affiliate, would not be

involved, but it might join the project at a later stage, the sources said. (February 16, 2004)

Thai Olefins Co (TOC) recently announced a project to further expand its cracker to 785,000tpa by 2006. TOC is also planning a 300,000tpa monoethylene glycol (MEG) project. With the completion of the second-phase cracker expansion and the MEG project, TOC would have around 220,000tpa of surplus ethylene for a possible second downstream project. TOC aims to bring the project on stream in early 2006. It has formed a new company called **TOC Glycol Co** to carry out the project. (February 16, 2004)

Siam Cement is considering reviving a project for a second cracker in Thailand. The capacity of the proposed cracker and the types of downstream products were not yet known as the study was still at an early stage. There was speculation on whether Siam Cement would join hands with **PTT Pcl** to build the cracker. PTT is considering building a cracker – dubbed NPC3 – in Thailand. PTT could be joined by its affiliates, **National Petrochemical Co (NPC)** and **Thai Olefins Co (TOC)**. In any case, Siam Cement would invest in NPC3 indirectly even if it does not take a direct stake in the project. The company owns around 25% of NPC and around 7% of TOC. (February 16, 2004)

Mitsubishi Rayon Co (MRC) is planning a second project in Asia and reviving plans for a US project, in a bid to become the world's largest producer of methyl methacrylate (MMA). Thailand is one of the candidates being considered for the project as the company already operates a JV plant in Mab Ta Phut. The JV. The second Asian project is slated for startup in 2007-08. The capacity has yet to be decided, but it would be of at least 90,000-100,000tpa, which is currently world scale. (March 1, 2004)

VIETNAM

Thai Plastics and Chemicals (TPC) plans to add a new polyvinyl chloride (PVC) line at its facility in Dong Nai, near Ho Chi Minh City, Vietnam. The new 80,000tpa line would boost the company's PVC capacity to 180,000tpa. If approved by the government, the new line would come on stream in mid-2006, as its construction would take 24 months. The company is also considering adding a 3,000tpa line to its 8,000tpa PVC compounding unit. The company is operating the PVC and PVC compounding plants through **TPC Vina Plastics and Chemical Corp** and **Viet Thai Plaschem Co**, respectively. (February 16, 2004)

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ABOUT BDA

Business Development Asia is a corporate finance advisory firm which assists multinational companies in expanding their businesses in Asia through JVs, acquisitions and divestments. For further information on BDA's services or on any of the articles in this newsletter, please contact our offices below.

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