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Shell Achieves On-Spec Production At Pulau Bukom Ethylene Cracker

Singapore—Shell announced it has started up and achieved on-spec production at a new 800,000-t/y ethylene cracker at its Shell Eastern Petrochemicals Complex (SEPC) in Pulau Bukom, Singapore (PCN, 1 Mar 2010, p 1).

The complex also includes the production of 450,000 t/y of propylene and 230,000 t/y of benzene, used mainly for downstream chemical plants on Jurong Island, including Shell's 750,000-t/y ethylene glycol plant that came on stream late last year.

Based on Shell's technologies, the ethylene cracker has options for feedstock flexibility, allowing it to process various types of feedstock, from liquefied petroleum gas to heavy liquid hydrocarbon.

"The completion of the SEPC will create Shell's biggest, fully-integrated refinery and petrochemicals hub, bringing economic and efficiency benefits in terms of operations, logistics and feedstock," said Shell Chemicals Executive Vice President Ben van Beurden.

Additionally, a butadiene extraction unit at the complex, which Shell earlier said would have an initial capacity of 155,000 t/y, is slated to come on stream over the next few months (PCN, 16 Apr 07, p 1).

Braskem Considering Second Plant To Produce Green Polyethylene

Sao Paulo—Braskem is considering construction of a second plant to produce polyethylene (PE) from sugar cane-based ethanol, said Reuters quoting a company project manager.

The company is currently building a 200,000-t/y green ethylene plant at its Triunfo, Rio Grande do Sul complex in Brazil, which will be converted into 200,000 t/y of green PE. Start-up of the first unit is planned for the fourth quarter of 2010 and commercial production is expected to start at the beginning of next year (PCN, 23 Nov 09, p 3).

Once the first project is complete and manufacturers show enough interest in the green plastic, Braskem will consider a second plant. The second facility, for which a location is being studied, would take about three years to build. No other details were given.

Braskem recently committed to selling 50,000 t/y of its green PE capacity to Toyota. Last year, the company signed agreements to supply the green PE to Argentine based plastic packaging producer PetroPack and Acinplas.

Eastman's Texas Crackers Restarted

Longview—Eastman Chemical Co. on 24 Mar. said the two cracking units at its Longview, Texas, site are back on stream, consistent with its previously announced timeline (PCN, 8 Mar 2010, p 1).

A 20 Feb. power outage and subsequent equipment breakage resulted in the company shutting down the Longview site.

Eastman said it "continues to expect that the first quarter 2010 earnings per share impact of the outage, estimated to be between \$0.20 and \$0.25, will be mostly offset by higher than forecasted sales volumes and operating margin."

Romp petrol Plans \$18-Million Project To Boost Midia HDPE Capacity 70%

Bucharest—Romp petrol Petrochemicals said it will invest approximately \$18-million to increase the capacity of its high-density polyethylene (HDPE) plant at Midia, Romania, by 70%.

The project will raise the plant's capacity to 100,000 t/y from 60,000 t/y, and is scheduled to be completed by next March. It will be carried out in partnership with Mitsui Chemical, the licensor of the HDPE plant, and Rominserv, the general contractor of the Rompetrol Group.

The HDPE plant and a low-density polyethylene unit at Midia were shut down in 1996 because of a lack of ethylene feedstock, but restarted in 2007, following a \$14.5-million modernization project (PCN, 4 Dec 06, p 1).

Romp petrol "maintains its objective . . . of becoming one of the main suppliers and producers of polymers in the region," stated Rompetrol Group Chief Refining and Petrochemicals Officer Cosmin Cocean. He noted that in addition to the capacity increase, the project will result in "a reduction of over 10% in the processing cost, a diversification of the range of products provided, as well as an increase in the operating safety."

Equipolymers Selling Italian Assets To Indorama & Ottana Energia JV

Dubai—The Equipolymers joint venture between Dow Chemical Co. and Petroleum Industries Co. of Kuwait has signed a definitive agreement to sell its Ottana, Italy, purified terephthalic acid (PTA) and polyethylene terephthalate (PET) facilities to a new venture of Indorama and Ottana Energia (PCN, 2 Feb 09, p 1).

Equipolymers last year announced plans to sell the Ottana facilities, designed to produce 190,000 t/y of PTA and 150,000 t/y of PET, citing "disappointing" financial results.

"The decision to sell the Ottana assets was made to sustain the long-term value of the site while enabling our Equipolymers production facilities in Schkopau, Germany, to focus on R&D and new technologies in markets that best serve our customers," explained Ramesh Ramachandran, president and chief executive of Equipolymers. The company will continue to operate its two PET production plants in Schkopau, which have a combined capacity of 335,000 t/y.

Equipolymers did not disclose financial terms of the transaction. The sale is expected to close on 1 June 2010.

Mitsui Resumes Ichihara Ethylene Output

Tokyo—Mitsui Chemicals on 26 Mar. said it has resumed operations at its 553,000-t/y Ichihara ethylene plant in Japan's Chiba Prefecture (PCN, 15 Mar 2010, p 1).

The company halted operations when it experienced problems during normal production on 28 Feb. During a 4 Mar. restart of the facility, Mitsui was again forced to shut the unit when there was an increase in the concentration of methane and hydrogen in the ethylene.

Mitsui said necessary repairs and maintenance have now been completed.

SDK Creating Functional Polymers Unit Following Showa Highpolymer Merger

Tokyo—Showa

Denko KK (SDK) said it will establish a Functional Polymers Division within its chemicals sector on 1 July 2010, following the completion of the merger with its consolidated subsidiary Showa Highpolymer Co. Ltd. (SHP).

SDK announced last December that it would merge with SHP and SHP would be dissolved upon completion of the merger (PCN, 21-28 Dec 09, p 2).

The new division will take over SHP's marketing, production, technical service, and supply chain management functions, and SHP's product development functions will be merged into SDK's existing chemicals development department in the chemicals sector.

Additionally, an EM production department will be established in the petrochemicals sector at the Oita complex, and jurisdiction over the Tokuyama plant will be transferred from the petrochemicals sector to the chemicals sector.

Braskem Has Completed Acquisitions Of Quattor & Sunoco's PP Business

Sao Paulo—Bras-

kem, in announcing its financial results for 2009, said it has completed the acquisitions of Quattor and Sunoco's polypropylene (PP) assets (PCN, 1 Feb 2010, p 1; 8 Feb 2010, p 1).

The company noted that the purchase of Quattor "moved it up to eighth in the ranking of the sector's global companies, while the acquisition of Sunoco positioned it as the third largest producer of PP in the world."

Braskem earlier said Quattor would position Braskem as "the largest company in the Americas" with thermoplastic resin capacity of 5.5-million t/y. The Sunoco purchase included three facilities having a total of 2.1-billion lbs/yr of PP capacity.

FPG Denies Negotiations with Sinopec For Any Joint Chinese Investments

Taipei—Formosa

Plastics Group (FPG) is denying published reports that it is holding talks with China Petroleum Corp. (Sinopec) for joint investment projects in China, Dow Jones Newswires said.

The reports cited the 1-million-t/y ethylene cracker being built in Zhejiang by Zhenhai Refining & Chemical Co., in which Sinopec has a 71% stake.

FPG Executive Board Member C. T. Lee confirmed that his group is interested in investing in a Chinese naphtha cracker to supplement its petrochemical facilities in the country, but noted that it will insist on majority control.

Under current Taiwan law, Taiwanese companies are not allowed to invest in naphtha cracking projects in China.

EC Approves Artenius Acquisition by KP

Brussels—The

European Commission (EC) has approved the acquisition of Artenius by KP Chemical, a subsidiary of Lotte Group (PCN, 22 Mar 2010, p 4).

The EC examined the competitive effects of the proposed transaction, specifically the horizontal overlaps between KP and Artenius in the markets for purified terephthalic acid and polyethylene terephthalate resin. As a result of that examination, the Commission concluded that the transaction would not significantly impede effective competition in the European Economic Area or any substantial part of it.

Asmeda Plans Dakahliya NH₃ Plant; EPC Contract Expected This Year

Mansoura—Egypt's

Delta Co. for Fertilizers and Chemical Industries (Asmeda) is building a new 1,200-t/d ammonia plant at its Dakahliya complex in Egypt, a local industry source said.

The company plans to award a \$300-million contract for the engineering, procurement and construction of the project by the end of this year. An expected construction schedule was not given.

Asmeda currently has the capacity to produce 360 t/d of ammonia, 900 t/d of ammonium nitrate and 900 t/d of nitric acid at its Talkha-1 plant, and 1,260 t/d of ammonia and 1,725 t/d of urea at the Talkha-2 plant, both of which are located within the Dakahliya site.

India's NFL Signs LOI with Tecnimont For Feed Switch at Nangal NH₃ Plant

Punjab—India's

National Fertilizer Co. (NFL) and Tecnimont have signed a letter of intent for a project that will change the feedstock of NFL's ammonia plant in Nangal, India.

The project includes revamping the existing 950-t/d ammonia plant to use re-liquefied natural gas rather than the current fuel oil feedstock, as well as revamping necessary off-site and utility facilities. The plant will use KBR's Steam Methane Reformation technology, resulting in a reduction of the unit's energy consumption. Capacity of the facility will remain the same.

Tecnimont said the project, which will be executed on a lump-sum turnkey contract basis for about \$240-million, foresees the provision of technology licensing, engineering, procurement, construction and commissioning services.

GAIL last year signed an agreement to supply NFL's Nangal plant with 1.03-million scm/d of natural gas starting in 2012 (PCN, 2 Mar 09, p 3).

QP International, Total Ink MoU For African PC, Energy Projects

Doha—Qatar Petroleum

International and Total have signed a memorandum of understanding to establish a joint venture to pursue petrochemical, oil, gas and refinery projects in Africa.

"Africa is a very promising continent and the idea here is to seek opportunities be (they) upstream production for oil and gas or in the downstream like refineries or petrochemicals," said Qatar's Minister of State for Energy Mohammad al-Sada, as reported by Reuters.

People on the Move

Borealis—*Khadem Al Qubaisi*, managing director of International Petroleum Investment Co. and chairman of the board of Aabar Investments, has been nominated chairman of Borealis' supervisory board. He replaces *Gerhard Roiss*, who will become vice chairman.

LyondellBasell—*Bhavesh V. "Bob" Patel* has been named senior vice president of olefins and polyolefins, Americas. He was most recently general manager of olefins and natural gas liquids at Chevron Phillips Chemical Co.

Biofuel Energy Corp.—*Douglas M. Anderson*, previously chief executive of NuGen Energy, has joined the company as vice president of operations.

Sinopec Wins Construction Contract For \$1.7-Bn Kazakhstan PP Project

Almaty—China Petroleum & Chemical Corp. (Sinopec) has won a contract for construction of a \$1.7-billion polypropylene (PP) plant in Kazakhstan, Bloomberg reported.

Kazakhstan Petrochemical Industries (KPI) last year completed the feasibility study for an integrated petrochemical complex at Atyrau, Kazakhstan, that includes an ethane cracker, a propane dehydrogenation unit, a PP plant and two polyethylene (PE) facilities (PCN, 16 Mar 09, p 1).

The complex, due to be completed in 2014, will produce 450,000 t/y of PP and 800,000 t/y of PE, according to KazMunaiGaz National Co., which holds a 51% interest in KPI. Sinopec has agreed to purchase and export all of the PP production from the complex.

The Export-Import Bank of China will provide a \$1.26-billion loan for the complex, while KPI will invest \$300-million and Kazakhstan will provide a \$140-million budget credit.

LyondellBasell earlier confirmed its participation in the project, but has now notified KPI of its withdrawal from the project, the report said.

PetroVietnam Preparing to Start Dung Quat Refinery PP Output

Quang Ngai—PetroVietnam expects to start up its new 150,000-t/y polypropylene (PP) plant at the Dung Quat refinery in Vietnam's Quang Ngai province (PCN, 3 Dec 07, p 3).

Hyeon Sung Hong, director of Hyundai Engineering Co., the project's primary contractor, said construction on the plant was 99.45% complete as of 18 Mar., and the first PP production is scheduled to begin by the end of April.

The new facility, built at a cost of approximately \$166-million, will use 260,000 t/y of propylene from the Dung Quat refinery as feedstock.

LyondellBasell Expands Licensing Portfolio Of Olefin Recovery, Conversion Processes

Frankfurt—LyondellBasell has expanded its licensing portfolio of olefin recovery and conversion technologies under the new trademark name Trans4m.

The new portfolio of processes includes catalytic technologies for the selective conversion of low-value, mixed olefin streams from crackers to ethylene, propylene and butene.

Trans4m's portfolio also features a set of technologies for the separation, purification and isomerization of the C4 and C5 olefins streams of cracker operations.

"Operators can utilize any combination of Trans4m processes needed, enabling them to more effectively maximize the value of their olefins balance," explained Kaspar Evertz, senior vice president, technology business – licensing at LyondellBasell.

An unidentified Chinese chemical company has been granted the first Trans4m S technology license.

HMC Polymers Completing PP Expansion; Inauguration Scheduled for 2nd Quarter

Bangkok—HMC Polymers is currently completing an expansion of its Map Ta Phut polypropylene (PP) plant in Thailand, and expects to inaugurate the new facility during the second quarter of this year, industry sources reported.

HMC, a venture of PTT and LyondellBasell, is increasing PP capacity to 750,000 t/y from 450,000 t/y using LyondellBasell's Spherizone technology (PCN, 9 July 07, p 2). In announcing the project, HMC said it was also building a new 300,000-t/y propane dehydrogenation unit based on UOP's Oleflex process at the site.

The HMC expansion was not included in the court's recent suspension of projects at Map Ta Phut.

Eastman, SK Joint Venture Starting Acetate Tow Production in Korea

Seoul—Eastman Fibers Korea Ltd., a venture of Eastman Chemical and SK Chemicals, Eastman has begun the production of 27,000 t/y of cellulose acetate tow at its new facility in Ulsan, Korea (PCN, 22-29 Dec 08, p 3).

"The opening of this site will enable us to support the growth we see for cellulose acetate tow in Asia," said Michael Chung, vice president and managing director for Asia Pacific at Eastman. "We are pleased to have this additional capacity now available to serve our customers in Asia," he added.

Eastman is operator of the new plant and has 80% ownership, with SK holding the remaining interest.

The project increases Eastman's total worldwide cellulose acetate tow capacity to 200,000 t/y. Eastman also produces the product at its Kingsport, Tenn., and Workington, UK, facilities.

GAIL Reveals Interest in Nigeria For PC Plants, LPG Units & PLs

New Delhi—India's GAIL has expressed interest in building petrochemical plants, liquefied petroleum gas (LPG) facilities and LPG pipelines in Nigeria, according to local reports quoting GAIL Chairman and Managing Director B. C. Tripathi.

GAIL, as part of a consortium that includes Total, Shell and a Nigerian firm, is one of three shortlisted consortiums for Nigeria's \$30-billion National Gas Master Development Plan. Nigeria is believed to have 184-trillion cu ft of mostly unexploited gas reserves.

The project involves developing the reserves and building three large gas gathering facilities and pipelines, including a line across the Sahara Desert to supply gas to Europe.

MCHC's Mitsubishi Rayon Offer Succeeds

Tokyo—Mitsubishi Chemical Holdings Corp. (MCHC) has completed its tender offer for Mitsubishi Rayon Co., resulting in a total of 447,432,313 shares being tendered (PCN, 1 Mar 2010, p 3).

MCHC, which offered to purchase all outstanding shares of the company for ¥380/share, has acquired a 74.57% interest in Mitsubishi Rayon. The settlement date is scheduled for 30 Mar. 2010.

Following the acquisition, Mitsubishi Rayon will become a consolidated subsidiary of MCHC. MCHC said it is currently reviewing the effects of the change and will announce any changes "as soon as they are determined."

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Genomatica Raises Additional Funds To Speed Development of Bio-BDO

San Diego—Genomatica has raised another \$15-million in a first close of its Series C funding round, which will be used to accelerate the development of its production of 1,4-butanediol (BDO) from sugar and water (PCN, 8 June 09, p 3).

TPG Biotech led the new investment, joining previous backers Mohr Davidow Ventures, Alloy Ventures and Draper Fisher Jurvetson.

"After careful and rigorous scrutiny of this competitive field, no company is better suited to drive low-cost petro-alternatives into the chemical industry," said TPG Principal Patrick McCroskey. "In short order and through extremely efficient use of capital, Genomatica has proven its sustainable chemicals platform and demonstrated that it possesses a unique way to develop many low-cost processes that target billion-dollar-plus chemical markets, while reducing dependence on petroleum feedstocks."

Having proven the cost-effectiveness and purity of its BDO, Genomatica is currently validating its production process at a pilot scale. The new funding will allow the company to continue its plans for a fully integrated demonstration plant, where it will finalize the engineering of its process for commercial-scale BDO production.

As its BDO process is validated, the company plans to "continue to develop process designs for several other high-value chemicals with large existing markets." This new investment will help bring those products to a market where there is pre-existing and growing demand for sustainable manufacturing of chemicals.

ThyssenKrupp & PDNA Combine Units To Form S. African Engineering Firm

Johannesburg—ThyssenKrupp and South African engineering firm PD Naidoo & Associates (PDNA) have merged certain units to create a South African technology, engineering and project management company.

The new company, ThyssenKrupp PDNA Engineering, combines Uhde and ThyssenKrupp Materials Handling with PDNA Industrial Projects to operate in the oil, gas, chemicals, industrial and other sectors. Headquartered in Sunninghill, South Africa, the entity is owned 74.9% by ThyssenKrupp South Africa and 25.1% by PDNA.

ThyssenKrupp Engineering South Africa Managing Director Claus Ruhs noted that the new company already has a "substantial" backlog of orders in the chemicals, power and water sectors.

Uralchimplast, Itera Plan Venture For Russian Methanol Production

Moscow—Uralmethanolgroup has been established as an equally owned joint venture of OAO Uralchimplast and OGC Itera to build a methanol plant at Nizhny Tagil, in Sverdlovsk Oblast, Russia.

In the first stage of the project, a plant will be built to produce 600,000 t/y of methanol. A second stage is also expected, which will increase production capacity of the methanol plant and add storage facilities. A schedule for the two phases was not given.

Some of the methanol production will be used by the partners for the production of synthetic resins and some will be exported.

GulfNav Venture Renegotiating Order For Two Carriers with Korea's SLS

Dubai—Gulf Navigation (GulfNav) plans to either renegotiate or cancel a contract for two previously ordered chemical tankers from South Korean ship builder, SLS, said Emirates Business quoting GulfNav Chief Executive Per Wistoft.

The two 46,000-dwt carriers were due for delivery last year. The partners plan on renegotiating the orders, however, if an agreement can't be met with SLS the partners can cancel the orders, according to a contract signed with SLS.

Earlier this month, GulfNav and Stolt-Nielsen entered into an agreement with SLS for the purchase of four 44,000-dwt chemical carriers (PCN, 22 Mar 2010, p 2).

SPIC Sells Indo-Jordan JV Interest As Restructuring Efforts Continue

Chennai—Southern Petrochemical Industries Corp. (SPIC), in its continuing efforts to restructure its debt, has sold its 52.17% interest in the Indo-Jordan Chemicals Co. joint venture with Jordan Phosphate Mines Co. (PCN, 22 Feb 2010, p 4).

The sale, for a total of \$50.6-million, is part of a corporate debt restructuring program that is intended to raise funds toward restarting SPIC's idled fertilizer facility in Tuticorin, Tamil Nadu, India.

SPIC noted that it has already sold some assets and believes that it will substantially reduce its debt with one or two more divestitures.

Toyo-Thai Wins Vietnam Ethanol Projects


Hanoi—Toyo-Thai said it has reached agreements to build two ethanol plants in Vietnam, one for PetroVietnam and the other for an unidentified Japanese investment group.

Each facility will have a daily ethanol production capacity of 300,000 liters, and both are scheduled to be completed in 2012 to help meet growing Vietnamese demand for gasohol.

Cheil Completes Chinese Resin Unit

Tianjin—Cheil Industries, a unit of Samsung Group, has completed construction on a new synthetic resin plant in Tianjin, China, reported local sources quoting the company.

The new resin plant will have 10,000 t/y of acrylonitrile butadiene styrene compound and 6,000 t/y of engineering plastics compound capacity.



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