

FFS invests in future growth

FFS continues to grow and prosper in the highly competitive heating fuels market.

The company enjoyed another great year in 2001 with the key to success still pinned on the focus on core business and a strategy of investing in sustainable future growth. The highly motivated team is looking forward to yet another brilliant year with support from loyal and new customers says Tony Hurter, major shareholder and founder of FFS. Technological and marketing innovations have given FFS customers greater choice and flexibility, which has resulted in improved efficiencies and energy cost savings in their heating applications.

FFS will continue to improve on the goal of providing service excellence and establishing lasting customer relationships, he says. "Our ability to provide specialised fuels for niche markets has also opened up new business." Several exciting new capital projects are expected to take place this year.

They are: a new tank farm in Richards Bay (R3,5m) to receive ship slops and fuel imports; taking over the Total SA tank farm at Paarden Eiland in Cape Town; a new tar plant in Gauteng/Mpumalanga (R8,5m); plant expansions in Cape Town (R1,5m) and Secunda (R1m); and a new depot in Port Elizabeth (R1,5m).

Pointing out the upward sales trend at FFS over the past five years is Petrus Scholtz, marketing manager. Other FFS executives in the picture are from the left Don Hunter, Don Cochrane and Peter Froude.



The company is at the forefront of environmental responsibility in the heating fuels market. The commitment to environmental issues is underscored by successful ISO 14001 accreditation, which is audited bi-annually by both the SABS and Arcus-Gibb. The FFS website at www.ffs-refiners.com now carries a large amount of useful information including the FFS Heating Fuels Handbook, technical tips and Material Safety Data Sheets of all the company's products, to assist our customers in making the most out of their energy purchases.

what's inside



Veronica Thomas, transport controller for FFS Refiners in the Cape, knows how to keep the wheels turning.

- New tar recovery plant
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- Pelican keeps good company

FFS Refiners commissions recovery plant at Sasolburg

FFS has commissioned a new tar recovery plant at Sasol Chemical Industries in Sasolburg, at a cost of R1,5 million. The plant recovers tar from two dams that contain an estimated 30 000 cubic metres of tar which will be transported to the FFS Secunda facility for processing. The plant is targeted to extract between 600 tons and 700 tons of tar a month. Trial operations, supervised by Koos Rossouw, started on site at the dams with mobile diesel-driven pumps and two 80 cubic metre tanks some distance from the loading area. The ambient winter conditions cooled the tar below the pour point and loading became difficult. One load took five hours to unload at Secunda. A quicker means of recovering the tar was needed and an oil-fired boiler was installed to heat the tar to reduce viscosity. A new site was selected as close to the tanks as possible and below the dam wall (as seen in the photographs). The plant was designed to heat tar and load easily.

The road to the site was upgraded for tankers and a top-loading platform was linked to the dam wall with a bridge for access to pumps, tanks and heaters. The loading area was sloped and hard surfaced to contain spills. Installation: The plant was constructed in containerised modules and comprised the following:

- 1 A 1,5 ton per hour steam boiler which burns HFO, with associated fuel tank and reticulation
- 1 A condensate hotwell and boiler feed water system module
- 1 A 100 kVA power generator with an electrical control panel module
- 1 A tar heating module with heat exchanger, circulation pumps and valves on a manifold located on the dam wall next to the tanks

- 1 A workshop and equipment storage module
- 1 An office and canteen module
- 1 The existing tanks were incorporated into the plant and one of the 80 cubic metre tanks was replaced with a new one with a 10 sqm internal heating coil.
- 1 A new electrically driven suction pump
- 1 A floating pontoon to access the dams
- 1 A loading facility on the bridge
- 1 The portion of the plant on the dam wall is in a high hazard area due to fire risk and had to be constructed off site and piping connected without welding in the area.

Sasol safety staff watched this particularly closely as they experienced a fire on the dams recently. They were impressed enough to say: "You guys know what you are doing." Engineering design was done by Nicholas Matter of the FFS head office and the proposals were tabled at a meeting with Sasol engineering and utilities who accepted the concept. The modules were built in the Durban workshop under the supervision of FFS workshop manager Phillip Vermaak.



Be safe, and enjoy the advantages of low flashpoint fuels

Low flashpoint heating fuels can have cost and quality advantages over traditional fuels. However they require an increased level of operating safety. These fuels, with flashpoints below 38°C, are generally distillate fuels oils that require no pre-heating and have low sulphur and ash contents. Care must be taken when using these products, but a properly engineered and maintained system can be operated safely. To put the risk in perspective, a petrol station is a low flashpoint fuel installation and constantly has vehicles with unprotected electrical systems, hot exhausts and other potential hazards safely entering and leaving. The code of practice SABS 0131-2 (The Storage and handling of liquid fuel at large consumer installations) allows for the use of low flashpoint fuels in consumer installations provided that fuel storage tanks are in an underground pit. Aboveground tanks may be used if they have a storage capacity exceeding 83 cubic metres. Such aboveground tanks are also subject to the relevant safety recommendations of SABS 089-1 (The Storage and distribution of petroleum products in

aboveground bulk installations). The international trend is away from environmentally risky underground tanks and FFS installations all have aboveground tanks. Low flashpoint customer installations are manufactured to the usual high FFS standards, with the additional safety recommendations of SABS 089-1. These include:

- 1 Prescribed minimum safety distances between tanks and boundaries
- 1 Easy access for fire-fighting equipment and vehicles
- 1 Prescribed minimum filler and vent pipe sizes
- 1 An approved vacuum/vent or flame arrestor being fitted to the tank vents
- 1 Bottom entry filler lines
- 1 The volumetric capacity of the bund area must be able to contain at least 100% of the capacity of the largest tank
- 1 Valves must conform to an approved fire safe design
- 1 Pumps with individual spill containment drip trays

- 1 Pumps should be located outside the tank area in a separate bund where possible
- 1 The loading zone should be at least 15 metres from the fuel storage area
- 1 All electrical equipment near the fuel tanks and handling equipment must be appropriately classified. Generally speaking, equipment within the bund area should be flameproof (Zone 1) and other areas spark-proof (Zone 2). Classified areas should be marked
- 1 All equipment must be appropriately earthed. Note that vertical tanks resting on the ground are considered inherently earthed and no further bonding is required and that most tanks do not require lightning protection
- 1 A flexible earth bond to the road tanker must be provided at the offloading point. Once the installation is complete the following safety recommendations apply:

- 1 Entrance to premises where low flashpoint material is stored should be fenced
- 1 A disciplined inspection and maintenance protocol must be established and maintained
- 1 Possible ignition sources within the classified areas should be removed or disallowed
- 1 No spark producing operations should take place in the classified areas before the area has been certified gas-free and a hot-work permit issued
- 1 Vessel entry permits should be issued before work inside any tank begins
- 1 Suitable fire fighting equipment should be installed and maintained
- 1 Faulty equipment should be taken out of commission immediately and repaired or replaced to a suitable, safe condition before re-commissioning
- 1 Most well run plants should be able to meet these requirements and the customer will be able to enjoy the advantages of a low flashpoint fuel safely.

FFS plants are cleaner, healthier and safer

FFS now has five plants certified to ISO14001 for their environmental management systems. There are still less than 200 operations in South Africa that have achieved ISO14001 registration for environmental management systems, and FFS is understandably proud of the achievement. Although the newly acquired Chloorkop branch had its own EMS, the in-house system developed by FFS was implemented in line with other group operations, and Chloorkop hasn't looked back since.



FFS management is committed to environmental improvements at its plants. A new roof over the loading bay at the Teakwood refinery in Durban ducts rain away from the contaminated area to reduce the amount of effluent water to be processed in the plant.

A safety management system compliant to OHSAS 18001 will also be developed and integrated into a single management system at each of the branches. The management systems being put in place are not just paper exercises, says FFS divisional general manager Don Hunter.

After almost three years of operation under formal environmental management systems, the improvements at all FFS plants have been significant, resulting in cleaner, healthier and safer operations. The improvements have demonstrated management's commitment to the company's environmental policy and special recognition must be given to the company environmental officer Craig Stephenson who has shown real determination and tenacity in making a difference.

Significant sales expected from low ash product

A new FFS facility at Chloorkop has been configured to blend a range of products to produce a high-quality industrial heating fuel. The project arises from a joint venture agreement between Sasol Fuel Oil and FFS. The new product FO18 has low ash levels and, in particular, low aluminium levels. The blend plant has positive displacement pumps and is electronically controlled to ensure perfect blending. The first customer to sign up for the new product, Pilkington Float Glass, started receiving deliveries in January 2002. Says FFS marketing manager Petrus Scholtz: "We expect to achieve sales of 5 000 tons a month this year and have potential for sales up to 14 000 tons a month."

Going the extra mile

In my capacity as terminal manager for P & O Nedlloyd I have had the pleasure of dealing with FFS's sludge removals division on a regular basis for the past two years. I have always been impressed with the division's consistent attitude to delivering service excellence. The general attitude is that of motivated persons who are always willing to go the extra mile to please a client. To date we have never made any negative comments about FFS's sludge removal division and can only speak very highly of them, and our ship masters personally request FFS for the offloading of sludge in Cape Town. Due to excellent service day and night, 365 days a year, we only use and recommend them to all P & O Nedlloyd-owned and chartered vessels calling at Cape Town.

Signed Paul van Rensburg

A stitch in time - technical tip



Clean your electric line heaters

This picture shows what an electric line heater looks like if you don't clean it. This carbon build-up took only six months. It causes loss of performance, increased use of electricity, eventual

blockage and destruction of the unit. When carbon particles break away they cause blockages, often misconstrued as a dirty-fuel problem. SOLUTION: Pull the unit apart and give it a hydro-jet clean every six months.

Download the Combustion Handbook

Warren Hallett has been retained as IT officer for FFS and his first task was to revamp the web site www.ffs-refiners.com. The result is pleasing and a large amount of useful information can be found. The Combustion Handbook, which explains all there is to know about fuel reticulation systems and installations, can be loaded from the site. There are also Material Safety Data sheets, What's new technically, and What's new at FFS. Also check out the FFS Bunkers site www.ffsbunkers.co.za

'Black Egret' the best thing since sliced bread

FFS Bunkers has brought new meaning to the expression: the best thing since sliced bread. Visitors to the FFS head office in Umhlatuzana, Durban, are astonished at the sight of 'slices' of barge neatly stacked in the yard. Engineers have been putting their collective heads together to design a modular barge to be barge literally on their doorstep, some 10 kilometres from the harbour. The sections being used were originally from a project to assemble timber barges for the Zaire River in the Congo.



This project collapsed and the sections were bought by FFS for the construction of bunker barges. They could not be used in their existing configuration so they were rearranged in a much bigger double-decker structure at the FFS workshop and now lie neatly aligned awaiting the full complement to be reached.

Sections of the 'sliced' barge have been transported by road to the docks where the 'slices' are being welded together. They will then be lifted into the water, with the final assembly being completed in the floating dock. Indeed, the Black Egret will be the best thing since sliced bread.

New highs reached at FFS Expo

Check out the new website: www.ffsexpo.co.za

Projects were outstanding at the annual FFS Expo for Young Scientists in Durban. Indeed, standards get better each year, making the work of judges increasingly difficult, says FFS divisional general manager Don Hunter. All the gold, silver and bronze medal winners were invited to represent the FFS Expo at the National Eskom Expo for Young Scientists in Pretoria. Of the 24 pupils who went to Pretoria, five projects were awarded gold medals, seven received silver medals and eight got bronze medals, which was quite exceptional. In addition, Jessica Cockburn of the Deutsche Schule was awarded the environmental prize and received an invitation to attend the European Science Expo to be held in Bratislava.

A total of 944 pupils in grades 8-12, from schools in the Durban area and as far afield as Hilton and Port Shepstone, took part in the FFS Expo and it seems the popular event will break the 1000-mark this year. Mr Hunter says FFS is proud of its long association with the Expo and congratulations are due to all the pupils who took part. Thanks and a committee to the organisers - a group of dedicated educators and university staff - who devote much time and effort to make sure the event is a success. They are helping to build the future.



A young scientist with her exhibit at the FFS Expo.

The 'Pelican' keeps the ships moving

As the saying goes: "A funny bird is the pelican, because its beak is hold more than its belly can". Well this is not the case with FFS Bunkers' newest bunker barge, which can hold 1160 tons of bunker fuel oil, 280 tons of marine diesel oil and 160 tons of gas oil in its belly. The 'Pelican', formerly the Durban Servicer, was bought by FFS Bunkers in May 2001 and after undergoing a major refit and revamp was transferred to Cape Town harbour in July. Although nearly 30 years old, the barge is in tip-top shape and in class.

The barge will now be a regular sight in Cape Harbour. Dennis Henwood, who is well known in Cape bunkering circles, has taken charge of the barge operation and in its second month of operation achieved 12 500 tons pumped on board. The Duncan dock fuel-oil pipeline is being scrapped due to deterioration and leaks, and this has resulted in brisk business for bunkering. The 'Pelican' is designed to carry out on-board blending and is able to supply HFO and gas oil blends to the smaller fishing vessels.



FFS Bunkers barge 'Pelican' keeps good company as it supplies 2 800 tons of fuel oil to the Cunard cruise liner 'Queen Elizabeth 2', in Cape Town. FFS Bunkers also operates a small barge in Durban, the 'Stanley', and a larger barge in Richards Bay, the 'Livingstone'.