

# Community Matters



ExxonMobil  
Chemical

Spring 2004

A newsletter from the Fawley Refinery

## Welcome!

This is the first edition of a new community newsletter from Esso and ExxonMobil Chemical at Fawley. We hope that it will help to put you in the picture about what we do at the Fawley site.

We plan to distribute 'Community Matters' three times a year. If you have any comments or suggestions about our newsletter, please contact the Public Affairs department at the number shown below.

This is also the main switchboard number for the Refinery. If you have any concerns about our operations, you can call us on this number at any time of the day or night, and we will do our best to respond to your query.

**Inside this issue:**  
***Cat noise update***

**If you want to know more about us, telephone our Public Affairs Department on**  
**023 8089 2511**



## The Fawley Site

**The largest oil and petrochemicals complex in the UK, Fawley is home to Esso Petroleum and ExxonMobil Chemical.**

The site covers some 13 square kilometres - that's about 5 square miles - and contains a range of oil refining and chemical processing plants. It also has some 330 storage tanks, which are used to hold raw materials, semi-processed and finished products.

The Fawley site is located on Southampton Water, which provides the essential deep-water channel needed for the delivery of crude oil by ocean-going tankers. Although the majority of the oil comes from the North Sea, the Esso refinery also imports crude oil from around the world, including Russia, the Middle East and even small quantities from South America. The oil is off-loaded at our marine terminal - the largest

independently owned marine terminal in Europe. Its mile-long jetty handles some 2,500 ship movements a year.

The oil is processed to provide a wide range of fuels and other petroleum products, including lubricating oil, wax and bitumen. An increasing amount of the refinery's production is used by the adjacent ExxonMobil Chemical plant to make a variety of petrochemical products that are used in the manufacture of plastics, textiles, toiletries, detergents and other everyday items.

The companies at Fawley always strive to take good care of the environment. The saltmarsh on the Fawley foreshore is a Site of Special Scientific Interest, and is home to over 22 species of birds. Surrounding the site on the landward side is the extensive tree screen, which contains some 50,000 mature trees and shrubs.



*Priest Croft residents try out their new computer, watched by warden Janice Furze (second from right), with Kirsty Gyton and Carol Dunford from Fawley Public Affairs.*

## A helping hand for Priest Croft

**Residents at Priest Croft, a sheltered housing scheme in Blackfield, are getting ready to surf the Net, thanks to a new computer funded by Esso and ExxonMobil Chemical at Fawley.**

The refinery regularly makes donations to local charities, schools and community groups. On this occasion, it stepped in with a £750 donation to supplement Priest Croft's own fundraising efforts. Now all the residents have the opportunity to use the new computer, which has been set up in their newly refurbished lounge.

Totton College has been providing training to teach the residents the basics of using a computer. Eventually, they hope to have internet access to chat to family and friends around the world.

Janice Furze, warden at Priest Croft said: "The computer opens up a new world for residents at Priest Croft, and the donation from Fawley has made all the difference to starting the course and making plans for the future."

# Goodbye to CAT NOISE

**If you live within earshot of the Refinery, you will be aware of the noise from our Cat stack. But the problem will soon be resolved.**

## Efforts to solve the problem

Last April, we completed a £2 million project designed to reduce the noise from our upgraded Catalytic Cracking plant. This included the installation of an additional silencer and a wider chimney stack.

Initially, these modifications seemed successful but, in June, the noise started to give cause for concern once again.

## Finding the solution

We re-adjusted our operational settings and installed additional sound-proofing on the Cat stack. This did not have an appreciable effect on the noise, so it was clear that we needed to take further action.

Consequently, we hired two firms of independent consultants who specialise in noise to investigate the problem. After extensive modelling and test work, including the construction in the laboratory of a working model of the critical part of the Cat stack, they



have come up with a solution. This involves removing a noisy valve and replacing it with other, quieter equipment.

## Project under way

The project to install the new equipment is already under way, and our neighbours should notice a drop in noise levels at the end of April. Refinery Manager Tom Katinas said: "I should like to apologise to our neighbours for the noise, and assure everybody that the 'jet engine' noise will soon be a thing of the past."

# The 'Fawley Flame'

Thirty years ago, there was a permanent flame over Fawley - the 'Fawley Flame' - but with developments in energy conservation, flaring is now a comparatively rare event. If you do see a flare, there's no need for alarm: it's a normal and vital part of keeping the refinery running safely.

## Why is flaring necessary?

The refinery's four flares act as its safety valve. Normally, materials from the refining process are sent to oil recovery tanks for conversion into products like petrol and diesel. But if there is an interruption to normal operations - e.g. when a unit shuts down for scheduled maintenance or if there is an unplanned loss of power - the system is unable to send all the materials to the process units. Instead, they are re-routed to the flare system.

## How does a flare work?

The flare works in the same way as a home gas heater: a pilot light burns constantly, igniting any gas that is sent to the flare. Steam is injected through the burner to ensure the complete, smokeless combustion of the gases.

The challenge for an operation such as ours is to maintain a balance which is acceptable to our neighbours: too much steam and the flame can become audible; too little and it can become smoky.

## What is that rumbling noise?

Occasionally during flaring a rumbling sound, rather like distant thunder, can be heard. This is the result of the mixing of refinery gas, air and steam during the flaring process. It is similar to the roaring sound a gas oven makes when first turned on.

## What is that black smoke?

Black smoke occurs when an insufficient amount of steam is available to inject into the flare. The flares are constantly monitored via CCTV so that the steam supply can be adjusted as required. On rare occasions there may be a delay in response before sufficient steam can be supplied, and black smoke may be emitted.

## What about the environment?

Although flares are an environmentally approved method of removing excess materials from the refinery's system, they are used only when absolutely necessary, to avoid wasting natural resources.



## Top marks for support

**ExxonMobil Chemical was recently given an award by Hampshire County Council in recognition of its support for members of staff who are school governors.**

In the first award of its kind, the Council asked Hampshire school governors to nominate employers who invest in education. Lisa Raynsford, who works in the computer department at Fawley and is a Governor at Manor Infants School in Holbury, nominated the company.

Public Affairs Manager Delia Ponter explains: "We think that school governors do a very important job. In recognition of this, we donate up to £1,000 each year to a school where an employee - or a member of their family - is a governor."

The Executive Member for Education, Councillor Don Allen invited employers to attend a special lunch held in Winchester and receive a plaque and certificate for the support that they give to employees who are governors of Hampshire schools. Our picture shows Delia Ponter collecting the award from Councillor Allen.

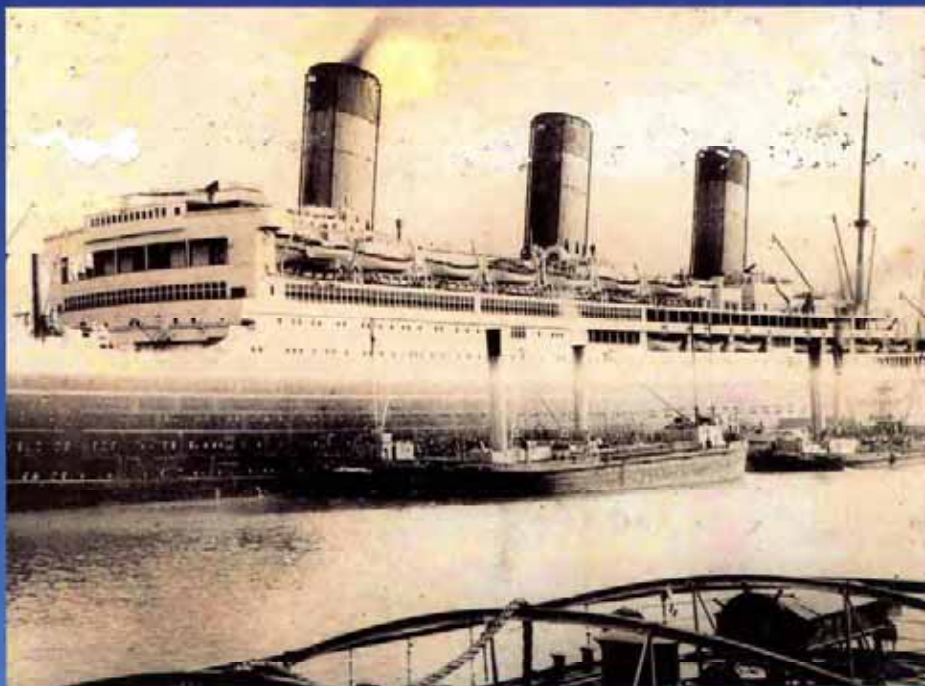


# Fill Her Up – With Half A Million Gallons

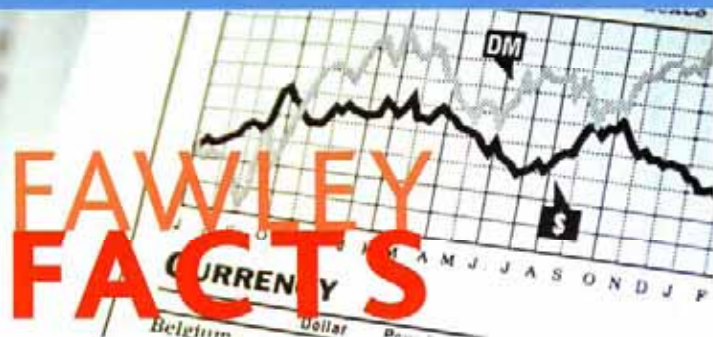
The great ocean liners have been bunkered with fuel from Fawley since the 1920's. A fascinating insight into bunkering operations has just been unearthed in the Fawley archives - a photograph album dating back to the 1930's which shows many of the great liners of the day being refuelled.

The largest liners - the Queens Elizabeth and Mary - would have taken on up to two million gallons of fuel. Advances in technology, both for engines and the fuel that powers them, mean that this has reduced to a mere half a million gallons for today's giant cruise liners such as the Queen Mary 2.

John H Whitaker Tankers carry out bunkering operations today. Their bunkering tankers - the *Jayne W* and the *Whitchallenger* - load marine fuel oils from Fawley's Marine Terminal. This is blended inside the vessel's tanks using a circulation system to give the correct grade. These two tankers make around 2,000 deliveries a year of Fawley fuel to ships in Southampton.



*The White Star Line's S/S Majestic is bunkered in Southampton in 1933. When the 56,550-ton liner completed her maiden voyage from Southampton to New York in 1922, she was the largest passenger liner afloat. She retained this honour until 1935.*



- ◆ Fawley converts around 11 million gallons of crude oil a day into petrol, diesel, aviation fuel and petrochemicals.
- ◆ One out of every six cars in the UK runs on Fawley fuel.
- ◆ Most vehicle tyres in Europe contain rubber made at Fawley.
- ◆ Some 85% of Fawley's products are pumped by underground pipeline to distribution terminals throughout the UK.
- ◆ Typically, some 3,000 employees and contractors work at the Fawley site.
- ◆ Fawley contributes about £65 million to the local economy every year.

PHOTOGRAPHY CREDITS: p1-Paul Carter; p2 Priest Croft-Ian Jackson; p3 Top Marks-courtesy of Hampshire County Council.



## Free Offer

Fawley was the setting for one of the rounds in Channel 4's popular painting programme, Watercolour Challenge. The winning painting by Jill Smith from Basingstoke has been reproduced as a print (38cm x 31cm). If you would like your own free copy, please phone Fawley Public Affairs on 023 8089 5298 and leave your details on the answerphone.