

Community Connections

December 2006

News from the Irving Oil refinery



Season's Greetings



Dear Neighbour,

On behalf of the Irving Oil employees at the refinery we would like to wish you and your family Season's Greetings and best wishes for a Happy New Year.

During 2006, we committed to enhancing our community relations by providing you with information and activities ongoing at our facility. We held an Open House in June to update the neighbours on the odour study and the construction of the new tail gas unit. We worked with the members of the Community Liaison Committee to install new playground at the Champlain Heights School.

In 2007, we are committed to continuing our communication efforts and look forward to meeting our neighbours at our 2007 Open House.

Sincerely,

LAHOLBS

- Terry Chuid

The People in the Red Hard Hats

Jacobs Catalytic Ltd. began working with the Irving Oil refinery in 1991 with mostly supplementary service work and moved into full service maintenance around 1995. On average, there are 350 Jacobs employees at the refinery looking after routine maintenance at any one time. Jacobs' flexibility means that their numbers can grow to meet the refinery's needs, usually up to 1,600 people for small projects and turnarounds. There were 2,500 Jacobs employees onsite during the Refinery Upgrade Project (1998-2000). Jacobs hires locally first then reaches out to other Jacobs sites across Canada for people if required. Jacobs Catalytic Ltd. of Calgary, Alberta, is the largest industrial maintenance contractor in Canada and has been performing maintenance work under maintenance agreements since 1952.

For more information about Jacobs Catalytic, please contact Ralph Dempster at 202-3000.



Jacobs Employees.

Ultra Low Sulphur Diesel

Our refinery is now producing Ultra Low Sulphur Diesel (ULSD), a new environmentally-friendly fuel that will reduce engine emissions and improve air quality. ULSD reduces the sulphur content in diesel from 500 parts per million (ppm) to 15 ppm; a reduction of 97%. As promised, our ULSD product is now available to our customers at the pump.

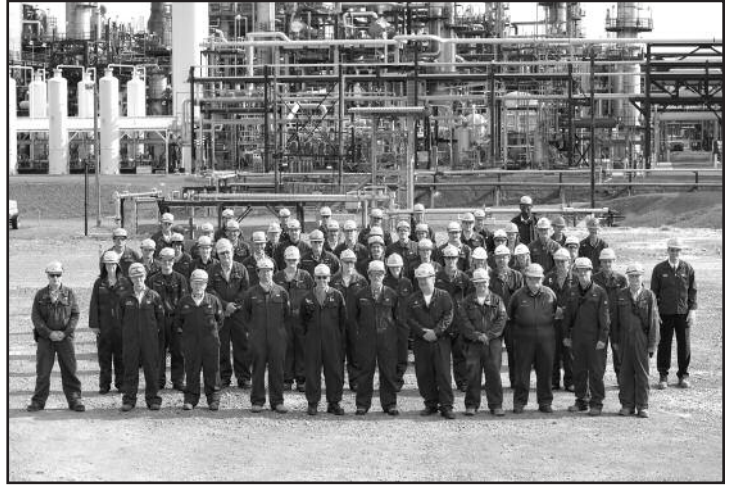
The reduction in sulphur content will result in reduced emissions of carbon monoxide, hydrocarbons, and particulate, which means improved air quality.

Since 2003, we have invested more than \$150 million to enhance our refinery processes to produce ULSD without increasing sulphur dioxide emissions. This investment included modifications to three major units, the hydrodesulphurization unit, the hydrocracker, and the hydrogen recovery unit. We installed a new pipeline from the refinery to the East Saint John Terminal and made modifications to a number of storage tanks.

ULSD must be kept completely separate from other fuels to

ensure that the sulphur content remains below 15 ppm. This is why we were required to install separate pipelines and have designated storage tanks.

Our refinery will have the ability to produce an average of 85,000 barrels per day of ULSD.



Members of the ULSD team.

Total Sulphur Dioxide Emissions Down

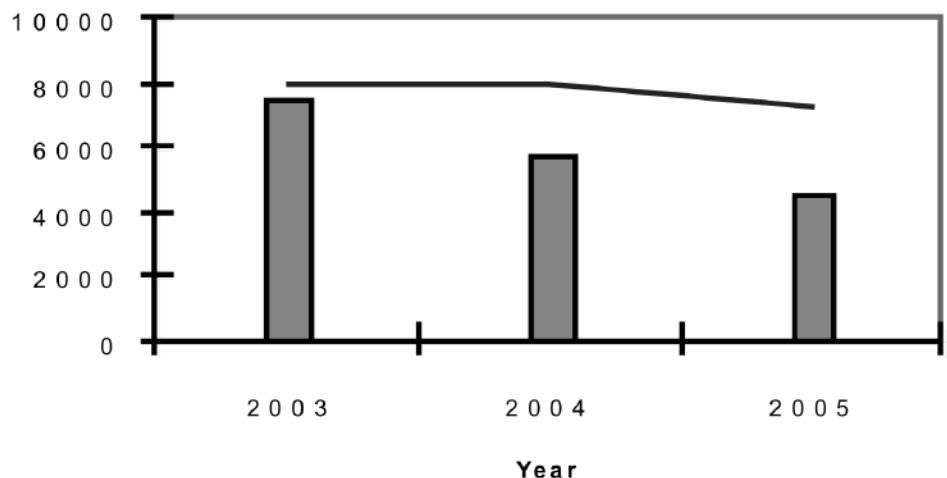
In 2005, the total sulphur dioxide emissions from the refinery were 4511 tonnes. This represents a 21% reduction from 2004 and a 40% reduction from 2003. In 2006, to date, total sulphur dioxide emissions are down by 7% from 2005. The decrease in total sulphur dioxide emissions is a result of the focus placed on emissions reduction by refinery employees.

Although elevated levels on the 1 hour limit at the Grandview Avenue monitor have not been eliminated, a 60% reduction of elevated levels has been observed. We are continuing to implement steps to reduce the off-site impact of emissions. In the fall of 2005, Irving Oil increased the height of two stacks to increase dispersion. We have also improved our day to day operations to help lower our emissions.

A monitor was installed on Midwood Avenue in the spring of 2005. In response to public concerns, a mobile sulphur dioxide monitor was also installed in Vista Ridge in December 2005.

In the spring of 2006, we announced our intention to install a new tail gas unit. We have received our environmental permits and will begin construction of the unit in January 2007. Tail Gas units are used to reduce sulphur dioxide emissions from the refinery. With the installation of the new tail gas unit we are expecting to see a reduction in emissions of 70% from the Sulphur Block. The proposed startup of the unit is 2008.

Annual SO₂ Emissions



Odour Study Update

The first meeting of the Odour Observers Committee was held at St. Joachim's Church on November 16th. The scope and approach of the Odour Study since it began in March 2006 and the results of the odour observations of the committee members from August 29th to October 31st were presented.

A brief outlook of the refinery process and the actions taken to manage and mitigate odour emissions from the refinery was presented by Jeff MacDonald, Environmental Specialist for Irving Oil. Elisabeth Lord, Vice President Operations for Odotech, described the approach of the Odour Study with an update of its progress. Finally, the collection of results from the Observers Committee was presented by Mara Lú Herrera Cohen, Environmental Specialist for Odotech.

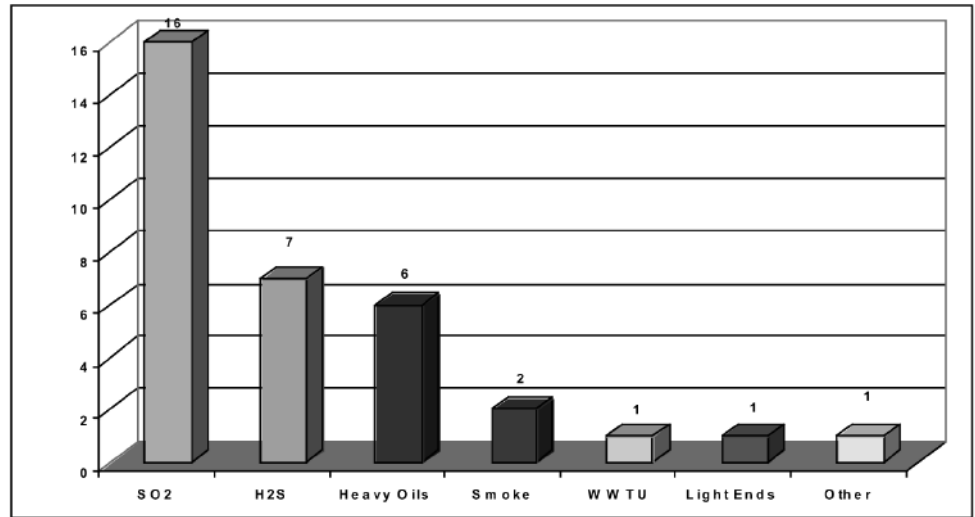
There are three main processes for refining crude oil: separation, conversion and treatment. Throughout the process, odours may be generated during regular operations, maintenance periods, or as a result of an upset in the units.

The refinery has made reducing odours a priority, measures have been implemented to reduce odour emissions. For instance, odours generated by maintenance on the tanks are now mitigated by a new odour abatement technology and new seals have been installed on a number of tanks in order to reduce emissions.

The Odour Study assesses odour impacts by identifying, characterizing and prioritizing the main odour sources by their impacts.

The Odour Observers Committee was created to help identify on-site odour generating operations and to validate odour mitigating efforts underway at the refinery. All members of the committee are residents from Champlain Heights, Forest Hills, or Midwood Avenue.

Distribution of Odours Observed



The committee will continue until August 2007. New volunteers are invited to contact Jeff MacDonald at 202-3000 or Odotech (observations@odotech.com) and to participate at the next information meeting which is tentatively scheduled for February 2007.



New Tail Gas Unit Update...

Work on the new tail gas unit continues. The unit is currently in the "design" phase. Engineers are working together to figure out the details of the new unit, before it is built.

Preparation of the site where the new unit will be placed is scheduled to begin in February of 2007.

Please contact Louise Steward at 202-3000 if you have questions regarding the New Tail Gas Unit.

Reduction of Volatile Organic Compounds

Volatile Organic Compounds, commonly referred to as VOCs are organic chemicals that contain the element of carbon and can be found in living things and in products derived from living things such as crude oil and refined petroleum products.

As reported in our Fall 2005 edition of Community Connections, Irving Oil is working diligently to reduce VOCs from escaping from tanks by implementing a tank seal replacement program. The tank seals are being inspected for damage and are replaced as needed. In 2005, the refinery replaced the seals on two of the larger tanks nearest our neighbours. In 2006, the refinery has already replaced an additional two seals, inspected two seals, and is in the process of replacing one additional seal.

We are currently evaluating a vapour recovery system for the product truck loading rack locating in the marketing area. This recovery system will help stop vapours from escaping to atmosphere when trucks are being loaded and when fuels are being blended. We anticipate the vapour recovery system will be installed in 2009.



An Irving Oil Home Heat truck loading heating oil at the refinery.

These initiatives will reduce the release of VOCs to the atmosphere and help reduce odours from the refinery that are carried by the wind to our neighbours.

Fall Maintenance Turnaround

On September 20th, we began our fall maintenance turnaround at the refinery. Planned maintenance activities included work on the #4 Crude Unit, the Naphtha Hydrotreater Unit (NHT), the Hydrogen Desulphurization Unit (HDS), and one Sulphur Recovery Unit.



In keeping with the tradition of naming our maintenance turnarounds, we called this fall's turnaround "Operation Lighthouse." The lighthouse is symbolic of strength, endurance, safety, reliability, and leadership.

The #4 Crude Unit had its first major maintenance completed since its start up in the spring of 2000. The work included cleaning and inspecting parts of the unit. The crude unit is used to remove contaminants from the crude oil and to separate the oil for further processing.

The maintenance on the NHT Unit included replacement of furnaces, drums and valves, and vessel inspections. The NHT unit's main purpose is to reduce sulphur and nitrogen content in gasoline.

The catalyst in the HDS Unit was changed and sent to a recycling facility for regeneration so that it can be reused. Catalyst is sand based and used to promote chemical reactions in the unit. The HDS Unit removes sulphur and contaminants from the product.

One of the refinery's Sulphur Recovery Units had some instrumentation upgraded. Sulphur Recovery Units remove sulphur from the gases created by the other refinery units.

There were 1246 tradespeople working in two shifts at the peak of maintenance during the turnaround and they worked 306,045 manhours in total. The turnaround was complete on October 29, taking a total of 29 days.

New Proposed Refinery: Questions and Comments

If you have questions regarding the announcement made in October regarding the possibility of a new refinery being built in the Saint John area, please call: 1-888-525-1777. Your call will be returned within 24 hours.