

# SiteLine

## Joffre Site Community News

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Birds such as this Sprague's pipit are attracted to wetlands and treed areas such as NOVA Chemicals Community Nature Trail.

## Maintaining our positive momentum

With the jolt to Alberta's economy from low crude prices, I've been asked one question repeatedly: How does this economic situation affect NOVA Chemicals Joffre Site?

There are both positive and negative factors currently affecting our business results. On the positive side, the demand for our ethylene and polyethylene products has remained steady, the cost of our feedstock has dropped and the Canadian dollar has weakened. All of these contribute to good financial performance for NOVA Chemicals.

The low price of crude oil is the most significant negative factor, more than offsetting the benefits of our low feedstock costs. The prices for our products are set by the global market. The cost of production from the highest-cost producers generally sets the basis for product prices. These producers are the ones who make products such as ethylene and polyethylene from oil-based raw materials. When oil prices drop, there is a corresponding drop in product prices. This price decline has been substantial over the past few months.

The significant work we have done in recent years to diversify our feedstock sources and improve the efficiency of our operating facilities, combined with the weakened Canadian dollar, will allow us to continue to execute our plans in this lower oil price environment.

NOVA Chemicals continues to be a healthy, strong company within our industry. We are moving forward confidently with a number of significant growth projects in Alberta and Ontario. We are also forging strategic partnerships with our important customers through initiatives such as the expansion at our technology development facility, the Centre for Performance Applications in Calgary. Scheduled to open later this year, the Centre will provide customers with a collaborative space to work with us to develop higher-value products and applications.

At the Joffre Site, we are proceeding with more than \$1.2 billion in growth investment: The Polyethylene 1 (PE1) Expansion Project is scheduled for start-up in the last quarter of 2016, and our Ethylene 2 (E2) Furnace Refurbishment work is well underway (see project updates on pages 2 and 3). The economic value we bring to the region and our workforce needs — both permanent employees and contractors required for projects and maintenance work — are unchanged.



After extensive internal business analysis, the NOVA Chemicals Management Board decided not to proceed at this time with the proposed Ethylene 2 Debottleneck (E2DB) Project we discussed with you last year. This decision was not based on oil price decline, but was the outcome of our Board assessing our strategic priorities, and weighing the economic attractiveness of various projects and how they position us into the future.

Our positive momentum also encompasses our commitments to Responsible Care® and to the community, particularly as we reach the peak construction workforce this Summer. We continue to proactively consider and work to mitigate impacts on our neighbours.

Please join us at our April 29 Community Open House (invitation page 4) where we can continue to obtain your input on our operations. I am looking forward to a productive 2015 at the Joffre Site, and a continued positive working relationship with our neighbours and community.

Rick Van Hemmen, Joffre Site Leader

## Refurbishment of first E2 furnace underway

The E2 Furnace Refurbishment Project is underway to address existing furnace reliability challenges and ultimately enable E2 to operate at full design capacity. Air quality and noise management benefits are expected from the furnace design improvements.

To ensure a reliable supply of ethylene for our PE1 Expansion Project, the first phase of the project got underway last year with five furnaces on the work schedule at a cost of approximately \$250 million. (There are 11 furnaces in total in E2.) The first of these five refurbishments is expected to start-up this Fall after construction and commissioning are complete.

Construction of the remaining four furnaces in this first phase will follow with scheduled completion by the end of 2016.

About 150 trades people are on site for this work.

Once approval is received from NOVA Chemicals' Board, we plan to start the second phase with four additional furnace refurbishments. This work is expected to start in 2017 and continue over a two-year period.



*A recent project milestone was the removal of the last large piece of equipment in the refurbishment of the first furnace.*

## Under a minute

Early this year, our Emergency Response personnel toured the 1st Joffre Multi-Unit with Girl Guides of Canada. The youth group had a hands-on experience with our emergency response equipment including a demonstration of how to don your emergency response gear in less than a minute.



## In the spirit of friendship

The Joffre Site recently donated 10 working computers including monitors and keyboards to the Red Deer Native Friendship Society (RDNFS) for use with their newly opened Aboriginal Youth Centre for Success Program. The Program provides youth with a place to improve immediate and long-term social, educational, economic and health outcomes through support and services that meet their individual and cultural needs.

"The RDNFS is an empowered Aboriginal community where people are living productive balanced lives. With the help of donations from supporters such as you we will continue to see improvements in the work that we do," says Executive Director Tanya Schur.



*Receiving the delivery at RDNFS of computer equipment from the Joffre Site (from left): Tanya Schur, Josh Wickens and Jim Moreau.*

## Verification rescheduled to June

Every three years, as part of our commitment to Responsible Care®, we undergo a third-party Responsible Care verification through the Chemistry Industry Association of Canada (CIAC).

We reported in the last issue of *SiteLine* that the verification was to take place in April. It has been rescheduled to the week of June 15, 2015.

This will be our fifth verification process; the last one was in 2012. Joffre Community Advisory Panel (JCAP) member Kathy Pyper will be the community representative on the independent panel.

Participation in the verification process will provide us valuable third-party perspective on how we are doing in relation to the Responsible Care codes and ethic. NOVA Chemicals is proud to be a founding member and leader of the original Responsible Care ideals as well as the recently updated ethic and principles that reflect the industry's commitment to sustainability.

For more information on the process:  
[www.canadianchemistry.ca](http://www.canadianchemistry.ca)

## PE1 Expansion Project Update

# Peak workforce numbers expected by end of summer

During the next few months, the number of workers at our PE1 Expansion Project will slowly ramp up from the current level of 300 to a peak of about 800 by the end of summer for about six months.

We recently met with Alberta Transportation to discuss temporary measures to address construction workforce traffic-related impacts. We facilitated a Work Access Agreement with Alberta Transportation for Lacombe County to keep the merge taper lanes clear of snow at the Freedom Rd. and Highway #11 intersection to avoid congestion during the winter months. Alberta Transportation will also be installing an "Important Intersection Ahead" temporary sign for west-bound traffic in advance of the intersection. Increased enforcement will continue through March 2016. The PE1 Expansion Project continues to promote carpooling and to investigate proactive dust control in the areas where workers may reroute themselves to avoid intersection wait times.

The project continues to make progress with start-up scheduled for the the last quarter of 2016. Foundations are expected to be complete this Spring. With major structures in place and the skyline noticeably changed, the project is now focusing on more detailed work like electrical, instrumentation, piping and mechanical systems. Pre-engineered buildings and most of the site grading will be finished by the end of this Summer. By year-end, electrical / instrumentation modules, building enclosures, structural steel, equipment installations, main piping systems and power distribution will be complete.

Electrification of the new electricity substation will be completed this Spring with tie-in to the existing system.

## Community Nature Trail taking shape

Piling and structure work is nearing completion in the 89-hectare (220-acre) NOVA Chemicals Community Nature Trail. Minor additional work will be undertaken during April to July allowing the area to dry thus preventing damage to the wetlands. Once the area is dry, our contractor will complete the trail surface, parking lot and picnic area, and interpretive signs will be installed.



Starting in May, and as part of our community commitment to zero-net tree loss during our expansion projects, we will plant more than 10,000 shrubs and trees (largely native) in the area.

The PE1 Expansion legacy project is planned for completion and enjoyment by the community and our employees by Fall 2015. The unique project demonstrates how wildlife habitat, agriculture, industrial and recreational uses can exist harmoniously.



*With major structures in place and the skyline noticeably changed, the project is now focusing on more detailed work like electrical, instrumentation, piping and mechanical systems.*

## Expanded rail yard virtually complete

Surfacing, track work and tie-ins to the PE1 loading barn are expected to be complete by Summer 2015, at which time the expanded rail yard north of the Joffre Site will be turned over to our operations staff. Until the PE1 Expansion is complete, we will use the track to store the new rail cars which will soon start arriving at the site.

The expanded rail yard will help us meet the approximate 30% increase in the shipment of polyethylene product from our site. About 450 new rail cars are being added to our fleet. No additional trains will be involved in moving the product.

At a stakeholder workshop in 2013, NOVA Chemicals made a number of commitments to address community concerns related to our expanded rail operations — specifically those related to reducing noise impacts. Our North Rail Yard Noise Abatement Strategy includes:

- A self-imposed curfew in the north end of the north rail storage yard limiting night-time operations from 10 p.m. to 7 a.m., with the exception of reasonable, unusual circumstances;
- Operational procedures related to the "best practice" movement of rail cars;
- Third-party annual noise monitoring to review rail yard performance against the ERCB Directive 38 (noise); and
- Ongoing engagement with Rail Service Provider(s) regarding delivery and pick-up times that impact operations.

## Joffre Site recognized as Top Campaign Contributor

Our Joffre Site recently received a 2014 Top Campaign Contributor award from the United Way of Central Alberta. The United Way of Central Alberta raised a total of \$2.3 million during the 2014 community campaign — \$715,942 of that contributed by NOVA Chemicals' employees and retirees and the company's matching dollars.

Our cumulative total contributed to the United Way of Central Alberta since 1995 is \$5.6 million.



## Regulatory update

**Joffre Site potable water treatment system upgrade complete:** In addition to the existing treatment equipment, membrane microfiltration and UV disinfection systems were added. The system was upgraded to comply with the site's water works approval.



### SiteLine is published by NOVA Chemicals Corporation

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### For more information, please see these websites:

- [www.novachemicals.com](http://www.novachemicals.com) | [www.novachemicals.com/Joffre](http://www.novachemicals.com/Joffre)
- Chemistry Industry Association of Canada: [www.canadianchemistry.ca](http://www.canadianchemistry.ca)
- American Chemistry Council: [www.americanchemistry.com](http://www.americanchemistry.com)

## PE2 turnaround set for May

The Polyethylene 2 (PE2) facility will be shut down on May 20 for about 30 days to allow for maintenance and renewal outside of day-to-day maintenance activities.

At about \$25.0-million this turnaround provides us an opportunity to clean equipment, conduct pressure vessel inspections to comply with Alberta Boilers Safety Association regulatory requirements, make process optimizations / improvements and conduct preventative maintenance.

As always, minimizing impacts on the community is a key area of focus. We will minimize flaring required during plant shut-down and start-up to reduce environmental and economic impacts. Flaring is expected to start May 20 and continue on-and-off over several days to responsibly dispose of intermediate process gases until the plant is completely shut down. Flaring and steam venting are also expected when the plant is restarted the week of June 15.

About 500 (650 at peak) contractors will be on site working staggered shifts to decrease impact on area roadways. An emergency drill the first week of the turnaround will ensure contractors are familiar with site emergency response procedures.

If you have questions, call our 24-hour number 403.314.8767 or email [joffresite@novachem.com](mailto:joffresite@novachem.com).

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## Community Open House

**Date:** Wednesday, April 29, 2015  
**Time:** 5:30 to 6:30 p.m. "Drop in to Chat"  
6:30 to 7:30 p.m. Presentation/Discussion  
**Place:** Haynes Hall (located on the corner of Haynes Highway [Range Road 24-4] and Township Road 39-0, 10 km from Highway #815)

### Refreshments will be served

- Agenda:**
- Get business and facility operations updates
  - Get updates on the PE1 Expansion Project
  - View Maskepetoon Community Crime Watch Association display
  - Discuss any topic of interest
  - Provide your input and suggestions

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