

SiteLine

Joffre Site Community News

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Do you know how to Shelter-in-Place?

A quick refresher on page 4

Taking a look at our areas of focus for 2018

As Spring rolls into Alberta, I realize how quickly the first quarter of this year has passed by. It's a good time to sit back again and check how we are doing on our priorities and areas of focus for 2018 at the Joffre Site. Here is a look at some of them.

Safety is unquestionably a top priority for us. At NOVA Chemicals, **we want every employee and contractor to return home safely each day.** When it comes to safe, reliable, competitive operations, our goal is zero workplace injuries and illnesses. NOVA Chemicals is a founding member of Responsible Care® and as Joffre Site Leader, I have made a pledge to further enhance the visibility of safety as part of our overall Responsible Care commitments. Our employees and workforce are also members of the community and taking care of each other and the community is a priority for me and the site's leadership team.

As we have just filed two significant regulatory applications (renewals for our Operating Approval and Waterworks System), I've had an opportunity to review the areas of **continuous improvement in our operating systems, programs and procedures** at the Joffre Site. These measures — from installation of a new stormwater retention pond to refurbishment of our Ethylene 2 (E2) furnaces, to achieving optimal operations at our recent Polyethylene 1 (PE1) Expansion — are all essential to the sustainability and success of our business. We are committed to future investment in our facilities, research into new technologies and energy efficiency, and collaboration with our customers on improved plastic products and sustainability.



As part of our long-standing Responsible Care commitment, this Fall we will take part in our regular three-year verification. As with previous verification processes, it provides an opportunity for our community to provide feedback to an independent board on **how we are listening to, and communicating with you**, and how we Take Care in our community. From addressing your questions on a yellow haze seen during inversions, to ongoing monitoring and management of rail traffic noise, to being the Sustainability Sponsor for the 2019 Canada Winter Games — a life-shaping experience as Central Alberta gets set to host the nation next year — our Responsible Care commitment and community programs continue to be integral to the way we do business at the Joffre Site.

I encourage you to come out to our April 18 Community Open House to discuss these and other priorities. Let us know what you think are important areas to focus on when it comes to our community. See you there!

Rick Van Hemmen, Joffre Site Leader

Less than a year to 2019 Canada Winter Games!

It takes two things to pull off the 2019 Canada Winter Games — sponsors and an army of volunteers.

NOVA Chemicals is a Sustainability sponsor for both The 2019 Games and the construction of the GWH Canada Games Centre at Red Deer College. The sustainability management plans are part of the goal to minimize the footprint of the 18-day event that starts February 15, 2019.

More than 30 NOVA Chemicals' volunteers joined a contingent of community volunteers to help with a number of activities from traffic control, to interactive sport and cultural activities to serving hot chocolate and treats at the recent community celebration marking the one-year countdown to the Games.

“Thank you to all the volunteers and community organizations. It was cold, but you braved the cold and created an unforgettable night for Central Alberta. The One Year Out celebration would not have been possible without you!” ~Canada Winter Games Office



Responsible Care verification coming this Fall

NOVA Chemicals takes part in regular verification processes since we received Responsible Care status in 1994.



Through this process, the Chemistry Industry Association of Canada (CIAC) regularly assesses member companies for credibility with peers and the public, and for continuous improvement in the implementation of the Responsible Care ethic and principles. The CIAC-appointed team will include a community representative. Our Joffre Community Advisory Panel (JCAP) provides input into the selection of the community representative.

Please watch for more information on this process in upcoming editions of *SiteLine*.



Following up on a recent community question

What is that yellowish-brown haze we see from time-to-time in the vicinity of the Joffre Site?

We received several calls during the past year about this question and wanted to share the information more widely with the community. Please contact us if you have any questions about this information or any comments.

A yellow or brown haze near the Joffre Site is sometimes visible during inversions, cold temperatures, or when we have stable weather conditions with no wind.

When any fuel is burned, such as the natural gas used to produce the heat for our manufacturing processes, oxides of nitrogen (NO_x) result. The NO_x is emitted through site exhaust stacks — in keeping with all regulatory requirements and emission limits we have with respect to air emissions. The NO_x emissions absorb light and under certain conditions can be seen as a yellowish-brown haze.

Stack NO_x emissions are tested continuously on our site cogeneration plant turbines and annually from furnaces, large boilers and heaters. We also operate two continuous fence line NO_x monitors. This ambient fence-line data indicates no ground level issues. All NO_x emissions, even during such haze, are well below the approval limits.

As part of our continuous improvement measures, we have a NO_x emissions steering team in place to focus on emissions performance, opportunities for emissions reduction and to work with regional stakeholder groups. Our E2 Furnace Refurbishment Project is also helping reduce NO_x emissions at the Joffre Site which in turn helps to reduce greenhouse gas (GHG) emissions (please see story page 3).



Community Open House

- Date:** Wednesday, April 18, 2018
- Time:** 5:30 to 6:30 p.m. “Drop in to Chat”
6:30 to 7:30 p.m. Presentation/Discussion
- Place:** Haynes Hall (Travelling east on Highway 11, turn north (left) on Range Road 244 for 3.3 km to Township Road 390. Cross over 390 and take first left into parking lot of Haynes Hall.)
- Refreshments will be served**
- Agenda:**
- Get business and facility operations updates
 - Discuss any topic of interest
 - Provide your input and suggestions
 - Fun science experiments for kids

We hope to see you there!

Planning underway for remediation of original stormwater retention pond

As commissioning of our new stormwater retention pond is expected to be complete this year, plans are underway for remediation of the original stormwater retention pond located just west of this new pond. Both the new and original retention ponds are located at the southeast corner of the Joffre Site.

The original stormwater retention pond has been in operation for about 40 years. There is some contamination from historical events dating back to the early 1980s.

Operation of the new pond now allows us to remediate the original pond. We expect the remediation to take more than a decade and will begin with sampling work at the pond this November and December. Once we have results from the sampling a detailed plan for remediation will be prepared. We will be using a staged “in-situ” approach to reduce the potential for issues like odour.

We will continue to share our remediation plans and schedules with you as they are finalized.



The new retention pond is expected to be complete this year.

Features of the new south stormwater retention pond

Our new stormwater retention pond, incorporating best practices, will help the site more effectively capture run-off from major storm events. Specifically, the new pond will allow us to:

- Meet a 1:25-year storm event;
- Avoid overflows and unplanned discharges;
- Improve make-up water quality for re-use in the our manufacturing facilities;

- Reduce maintenance challenges; and
- Allow for ongoing access for remediation of sediments.

The new pond, as well as all of our existing ponds meet regulatory requirements outlined by Alberta Environment and Parks (AEP).

Moving ahead with phase two of Refurbishment Project



Our E2 Furnace Refurbishment Project began in 2014, with five of the 11 furnaces now upgraded and modernized. This first phase involved a capital investment of more than \$350 million. Planning is now complete for phase two, which will include four of the remaining six furnaces. This phase includes a capital investment of about \$270 million and will be carried out during 2018 going into 2021.

During the refurbishment, we incorporate best available technology low nitrogen oxide burners along with a number of other upgrades. Confirmatory stack tests to date on first-phase furnaces have demonstrated expected reductions in nitrogen oxide levels. (Please see related story: Q&A, page 2).

About 200 trade workers are on site as the project continues.

Beyond the classroom

In March, we sponsored and participated in the Red Deer APEGA Science Olympics — an interactive event for students that takes learning beyond the classroom. Students were given a series of problem-solving challenges that demonstrated the fun side of engineering and geoscience and how these fields impact our lives.



At NOVA Chemicals, we rely on the ability to attract employees with a passion for STEAM (science, technology, engineering, arts and mathematics) education. In addition to supporting events such as these Science Olympics, our genScience team members bring hands-on experiments and activities to youth attending our annual Emergency Preparedness Awareness Community BBQ and our upcoming open house on April 18.



Students at the APEGA Science Olympics used skill and innovative ideas to develop creative solutions to various challenges.

Regulatory update

Applications for Renewal of Operating Approval and Renewal of Waterworks System Approval: In the second quarter of 2018 we will be submitting to AEP both of these renewal applications, as these approvals expire in 2019. Once AEP deems the applications complete, notices will be placed to allow for public review of the applications.

We have prepared a fact sheet highlighting the Overview Section of the Operating Approval renewal application. It includes summaries on our air, water, waste, noise, light and soil and groundwater management programs, as well as continuous improvement measures throughout the site. Please visit our web site: www.novachemicals.com/Joffre.

Agricultural land back in use

This Spring we plan to return about five hectares (12 acres) of land to local agricultural leaseholders. The land was formerly part of a greenhouse operation on our lands. We have been reclaiming the property since 2015 with the removal of above- and below-ground structures, as well as reclamation of topsoil. Work is expected to wrap-up this year with the removal of below-ground concrete footings, pads, some foundations, underground piping and a storage tank.

Shelter-in-Place

Shelter-in-Place is a five-step life safety approach for residents in the event of severe weather, a tornado, or an industrial emergency.

If you are told to Shelter-in-Place, emergency officials recommend that you:



1. Go inside. Turn on local radio or TV.



2. Close all windows and doors.



3. Shut off furnaces, air intakes and fans that draw outdoor air inside.



4. Listen to radio or TV for further instructions. Keep phone lines free.



5. If odour is strong, seal an inside room with wet towels at the base of the door. Breathe through a damp towel to filter air.

Keeping in touch...Site contacts and 2018 community events

For Joffre Site INFORMATION

403-314-2882.....Joffre Site Operations Information Line
403-314-8611 NOVA Chemicals Switchboard (8:00 am – 4:30 pm)
Email.....joffresite@novachem.com

For Joffre Site EMERGENCIES or CONCERNS (24 hours)

403-314-8767.....Joffre Site
1-800-561-6682 ...Transportation
1-800-780-6682 ...Pipeline

9-1-1..... Local Emergency Services Dispatch

Emergency preparedness activities

On-site (may be audible in community):

- Every Tuesday: Unit alarm testing
- First Saturday in November: Emergency Communicator System testing

Offsite Emergency Community Notification System testing:

- Annually, December 21 and June 21

We invite you to join us at these community events. They're a great opportunity to get Joffre Site updates, as well as for you to discuss any aspect of our operations and plans with us.

Community Open Houses:

- **Spring: April 18, 2018** (see invitation page 2)
- **Fall: October 17, 2018**

Annual Emergency Preparedness BBQ: August 16, 2018

Please watch *SiteLine* and community notices for details prior to each event. See you there!

SiteLine is published by NOVA Chemicals Corporation

P.O. Box 5006, Red Deer, AB, T4N 6A1
Attn. Roxann Good: 403.314.7421

For more information, please see these websites:

- www.novachemicals.com | www.novachemicals.com/Joffre
- Chemistry Industry Association of Canada: www.canadianchemistry.ca
- American Chemistry Council: www.americanchemistry.com



Connect with us!

