

SiteLine

Joffre Site Community News

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Special Edition: Annual Environment Review

NOVA actively promotes sustainable practices and the responsible management of our operational impacts to air, water, land, and biodiversity—all key components of our Joffre Site Environmental Program outlined in this edition of *SiteLine*.

Highlights of what's inside...

Business Updates.....2
 Noise Management.....2
 Waste Reduction.....2
 Water Resources.....3
 Air Emissions Management..... 3-4
 Caring for our Environment.....5
 Community Engagement.....6-7
 Stay Connected8



NOVA Chemicals was a stop on a tour hosted by Lacombe County in May. We welcomed Ambassadors and High Commissioners from 30 different countries to Joffre Site!

Welcome to the 2024 Environmental edition of *SiteLine*! **My name is Rob Thompson, and I'm pleased to introduce myself as the new Vice President of Manufacturing West.**

Although new to the role, I've been part of NOVA Chemicals for nearly 25 years, most recently as VP of Manufacturing East in Sarnia, Ontario. I'm looking forward to settling in central Alberta, and eager to continue to learn more about our community and our neighbours.



During these last several months, I've been busy interacting with employees and taking some time to get to know about our community and the great work, passion, and energy of the people and organizations across the area.

- In June, I **met with Lacombe County Councillors** and learned more about the local priorities while sharing NOVA's latest activities and plans for the year.
- I recently **attended the Central Alberta Child Advocacy Centre (CACAC) grand opening** to hear about their impressive work to offer a safe, comfortable environment for children, youth, and their families. The building is truly amazing.
- On May 4, I **participated in Steps for Life** at Bower Ponds to walk with my colleagues and their families as we raised awareness and funds to support families impacted by workplace injuries, illness, and tragedy. It was a great way to show our support and commitment to working safely every day.
- I also **participated in my first Joffre Community Advisory Panel** in March, where I enjoyed meeting the incredibly passionate members sharing the voices of Joffre residents and our agricultural community.

We also held our annual Safety Day on May 1, where colleagues from across the company discussed building a people-centered safety culture and

doing safety with people in a caring way. Here at Joffre Site safety is foundational, and Safety Day is an opportunity to take time, reflect and reaffirm our commitment to Responsible Care and zero incidents and injuries. It is essential that every employee and contractor go home safely, each and every day.

Over the next several months, **we are focused on the work ahead of us — turnaround is a busy time of year.** I've learned that this type of work requires the effort of the entire site. We also are mindful of the impact increased activity has on our community and we appreciate your patience as we increase our workforce to navigate through this necessary work to keep our plants safe and reliable.

We strongly value our relationships with our community neighbours, and we hope you enjoy learning more about our work, environmental and community engagement initiatives throughout this newsletter. Thank you for the warm welcome and support — I'm looking forward to meeting many of you in person in November for our Community Open House!

Sincerely,

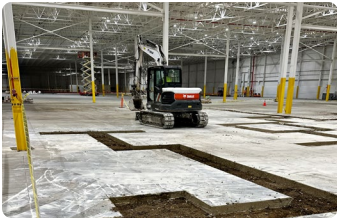
Rob Thompson,
Vice President Manufacturing West

BUSINESS UPDATES

NOVA's First Recycling Facility is Making Progress

Construction on NOVA's first mechanical recycling facility in Connersville, Ind., is making great progress. The facility is expected to begin recycling plastic film to create SYNDIGO™ recycled polyethylene (rPE) in approximately nine months. NOVA is collaborating with Novolex to operate the facility, drawing on the company's 20 years of experience in operating flexible plastics recycling facilities.

"NOVA has made a significant expansion of its Circular Solutions business with the investment in Connersville. The facility will process post-consumer plastic films to produce more than 100 million pounds of SYNDIGO recycled polyethylene," said **Greg DeKunder, NOVA's VP of Circular Solutions**. "The team has done an amazing job designing the plant and ensuring that the project is executed safely, on time, and on budget. I am proud of what this team has accomplished in its first full year at work towards our recycling ambition."



ENVIRONMENT

Noise Management Updates

Monitoring, modelling and mitigation are key components of our ongoing noise management strategy.

In 2023, analysis of historical permanent noise monitoring station data was completed. This data indicated that **night-time noise levels continue to be below the historic target sound levels during normal operations**. In addition, ad hoc noise monitoring was conducted during unit shutdowns and startups.

The North Rail Abatement Strategy 2023 results indicated that sound levels **continue to be below the Alberta Energy Regulator Noise Directive**.

There was one rail curfew exceedance for the north rail yard in 2023.



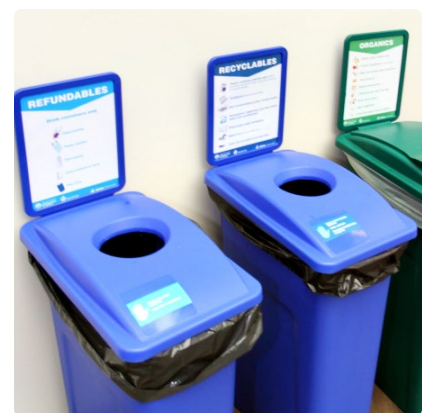
Our Commitment to Waste Reduction

We continue to look for ways to divert items away from the landfill.

In 2023, **66% of waste generated was recycled, reused, or recovered**.

Our Soil Enhancement Program continues to benefit local farmer fields with the **application of our spent lime/phosphate to 2,983 acres** in 2023.

Through ongoing promotion and awareness of our onsite recycling programs we **raised over \$8,000 for the United Way** to support in 2023. These funds support hot breakfasts for school-aged children, domestic violence therapy, literacy training, immigrant training, and more.



Joffre Site Planned Maintenance for Summer 2024

Chemical facilities need periodic maintenance and renewal outside of day-to-day maintenance. Our Advanced SCLAIRTECH™ Technology Facility 1 (AST1) and Ethylene 2 (E2) facilities will shutdown in June and August for planned maintenance.

- AST1 Turnaround early June to mid-July
- E2 Turnaround mid-August to late September

What can you expect?

- 1,000 (June/July) – 1,900 (August/September) contractors on site at peak times
- Flaring during plant shutdown and start-up

As always, MINIMIZING IMPACTS ON THE COMMUNITY IS A KEY AREA OF FOCUS by encouraging carpooling with our NOVA TO GO app.

If you have questions about this activity, call our 24-hour number **403.314.8767** or email **joffresite@novachem.com**.

For more business and environmental information, please visit: **www.novachem.com/Joffre**

NOVA Participates in Major Water-Sharing Agreement

Water is a valuable resource and a critical part of our manufacturing processes at our Joffre manufacturing facility.

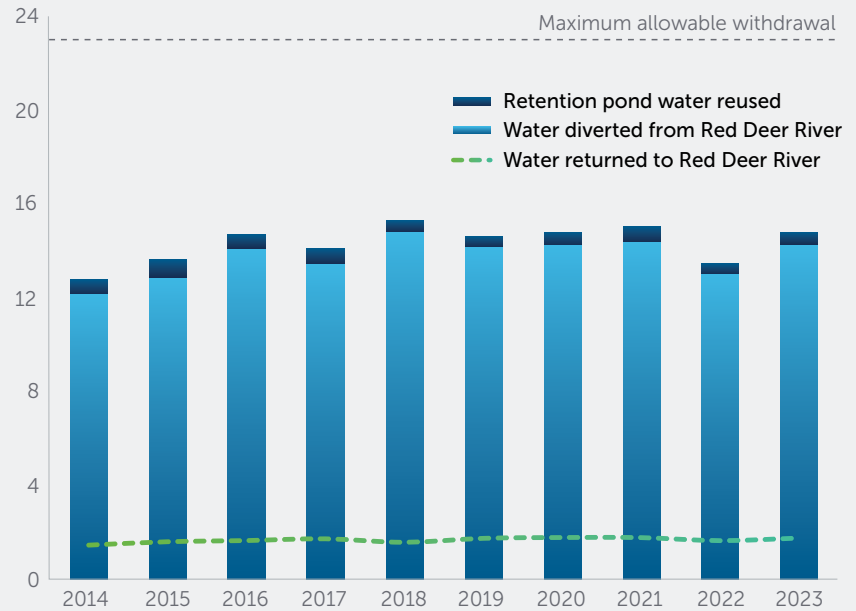
As an industry leader and founding member of Responsible Care®, NOVA Chemicals takes great care in ensuring the responsible treatment, reuse, and returning of water to the Red Deer River. Our focus on water conservation is even more important during periods of potential water scarcity; in April **we joined a major water-sharing agreement** organized by the Government of Alberta, our industry peers and municipalities across the province.

In 2023, NOVA **withdrew 14.3 million m³** or 63% of our allotment from the Red Deer River. We also **collected and used 0.46 m³ from surface runoff**.

In 2024 industry license holders are committed to using the minimum volume of water practical to maintain safe and reliable plant operations. NOVA continues to pursue conservation opportunities that meet operational needs and business needs.

Joffre Site Water Usage

(million m³ of water)



This graph shows our water use at the Joffre Site for NOVA Chemicals and Cogen. Generally, the greater the production rate, the greater our water use. Water use also fluctuates with other site activities such as turnarounds and weather conditions.

Ensuring Air Emissions Meet Alberta Ambient Air Quality Objectives

Through the Joffre Site Air Emissions Management Program we strive to reduce emissions, monitor impacts and continuously review our performance.

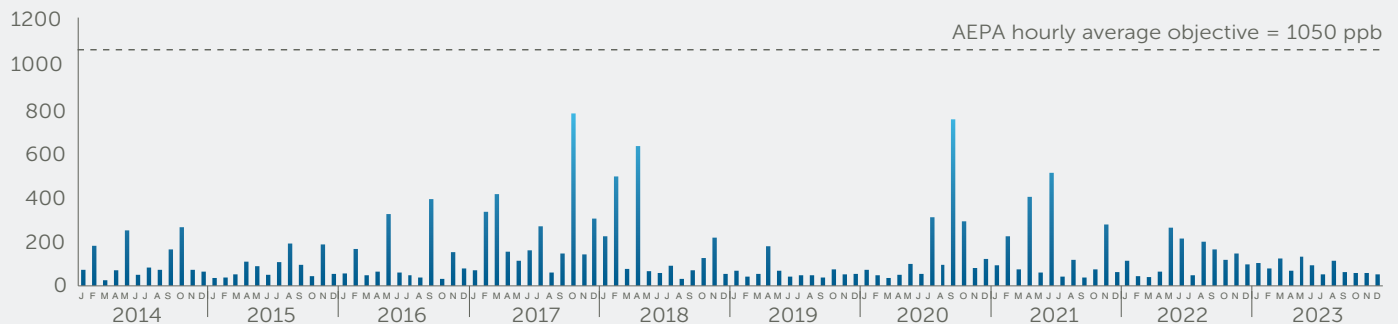
We remain focused on ensuring air emissions are below all regulatory compliance limits and air quality objectives set by Alberta Environment and Protected Areas (AEPA).

NOVA Chemicals interfaces with regional groups such as the Parkland Airshed Management Zone (PAMZ) and the Red Deer Air Quality Committee.

Data related to a variety of air quality parameters, as shown in the graphs below and on page 4, indicates our concentrations are consistently below established objectives.

Ambient Air Ethylene 1-Hour Maximum Concentrations

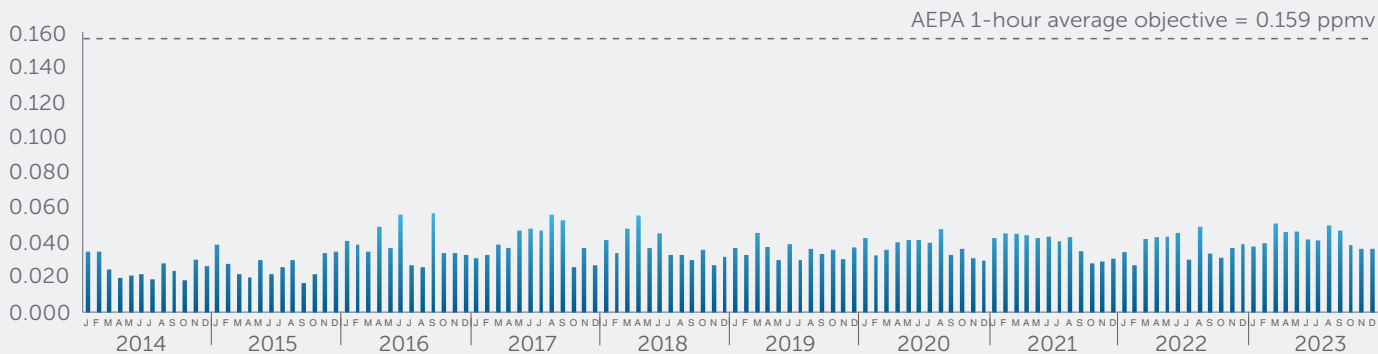
(ethylene reading [ppb])



Ambient ethylene (1-hour maximum) concentrations are well below the AEPA Hourly Average Objective of 1,050 parts per billion (ppb). The high concentration readings correlate with outage dates and plant start-ups, where most often additional flaring and equipment purging occurred. Operational corrections for flaring events and repairs made through the LDAR program (Leak Detection and Repair) have been made as necessary, and have successfully reduced the number of high concentration readings.

Ambient Air NO₂ 1-Hour Maximum Concentrations

(NO₂ readings [ppmv])

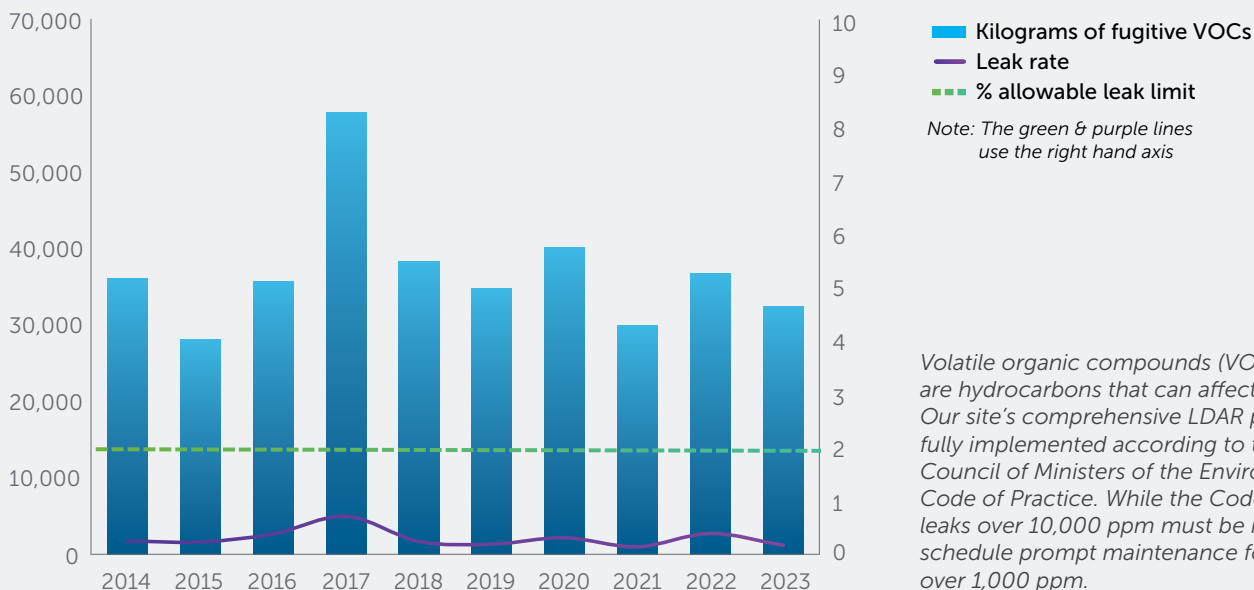


Concentrations of oxides of nitrogen (NO_x), specifically NO₂, are consistently below regulatory limits.

Petrochemical facility fugitive VOCs

(kilograms of fugitive VOCs)

(% allowable leak rate)



Volatile organic compounds (VOCs) emissions are hydrocarbons that can affect air quality. Our site's comprehensive LDAR program is fully implemented according to the Canadian Council of Ministers of the Environment Code of Practice. While the Code states that leaks over 10,000 ppm must be repaired, we schedule prompt maintenance for any leak over 1,000 ppm.

What to Expect When we Flare

Flares are important safety devices used in refineries and petrochemical facilities. They safely burn excess hydrocarbon gases that cannot be recovered or recycled and do so in an environmentally-sound manner.

Our flare systems must meet strict environmental controls and approvals, as well as NOVA Chemicals' process safety and Responsible Care standards. The use of flares is minimized to the extent possible. Flaring can occur during start-up and shut-down of our facilities for planned maintenance, and also during unplanned operational interruptions.

We know that flaring may cause disruptions for our neighbours and community, particularly as it relates to noise, vibration, and flame glow. When you see flaring, please be assured that flares play a key role in keeping our facilities

running safely. Our operating policy is to minimize flaring to reduce environmental, economic and community impacts, we strive to minimize flaring, keeping it to times necessary for our continued safe operation.



Big Clouds — What Are They?

The cooling towers found at the Joffre Site are used for dissipating excess heat generated during various processes. Large plumes, or clouds, are created by water vapour exiting the cooling towers. Clouds become visible when the vapour mixes with colder ambient air.

These visible plumes are often seen at the Joffre Site and appear like white clouds. The plume consists of tiny water droplets and are different from emissions you may see from furnace stacks on site which are a result of combustion of fuel gases (similar to your vehicle exhaust).

Through efficient tower design and water recycling, NOVA Chemicals minimizes the water required during our processes, and the plumes help to return the moisture to the environment.



CARING FOR OUR ENVIRONMENT

Annual Red Deer Tree Planting — For over 25 years NOVA Chemicals employees and their families have supported the Red Deer Community Reforestation Program. On May 10 NOVA volunteers and their family members **planted over 700 trees in the Queens Industrial Park Reforestation Area.**



Adopt-A-Highway Spring Clean Up — As part of our sponsorship of Adopt-A-Highway Programs, we **support 14 youth groups per year to sweep 35KM of ditches** surrounding the Joffre Site. The groups collect garbage and identify hazardous items for proper retrieval and disposal. **Please drive with caution when you see the youth groups in the area!**



Manufacturing West Sustainability Action Team

The **Sustainability Action Team** is an employee-led team passionate about sustainability and acts on initiatives that reduce environmental impact and/or raises awareness to influence positive personal behaviours.

Reducing Road Traffic, On and Off Site — To help reduce the impact of traffic in our community we have our NOVA To Go carpool app for employees and contractors to find carpool partners. We will be actively promoting carpooling and the use of our app during this year's turnarounds to help encourage ride-sharing. Our on-site bike share initiative encourages employees to utilize bicycles for transportation around the site to reduce the number of vehicles in use.

Nature Trail — Due to potential dry conditions this year, wildfire risk is high, please be mindful there is a no smoking policy at the Nature Trail. In the past few years, NOVA trialed a goat grazing program in the Nature Trail area, focusing mainly on high-use areas, around the trail itself. Due to cost and effectiveness, we are exploring other options to reduce fire load in the Nature Trail area.



Improvement Initiatives — In 2023, the Joffre production units came up with **25 new initiatives**, that included improvements to flaring, energy conservation, the Operation Clean Sweep program, and more!

COMMUNITY ENGAGEMENT

Connecting with Students in our Communities

So far this year NOVA Chemicals attended several career fairs to help share the different career paths available at NOVA. We spoke to students at the University of Calgary – School of Engineering, Maskwacis Cree Nation School, Lacombe Composite High School, Future of Work Career Fair and Conference at Red Deer Polytechnic, Sun Child School, HJ Cody High School, Red Deer Polytechnic Annual Career Expo, and Olds High School. We're looking forward to building a strong, skilled, local workforce for the future!



Lacombe County Meeting

Rob Thompson met with Lacombe County Councillors and staff on June 4 at the County office to share updates on NOVA's operations and gain insight on Lacombe County's priorities.



Giving Back for Giving Tuesday

At the end of 2023 we launched NOVA's *Giving Tuesday* campaign. Locally, we **donated \$200,000 across five organizations** that provide critical mental health support and services in our central Alberta community.



The Step Up Step Down mental health program is expanding to help youth facing significant mental health challenges.



NOVA is supporting the Climbing Tree Mentorship Program with the Central Alberta Child Advocacy Centre to help build youth resilience.



The Outreach Centre provides mental health programming for central Albertans, from suicide prevention in schools to therapy for youth, families in crisis and more.



Funding to United Way's six agencies that support counselling and mental health services in central Alberta.



Vantage Community Services focused counselling — NOVA's donation will support giving access to therapy services for those who are economically challenged.

Supporting United Way Central Alberta

2023 Campaign Results and Awards — At the United Way Central Alberta campaign awards in April, NOVA was recognized as the campaign's top donor, contributing to United Way's \$1.5M campaign. NOVA's campaign committee was also recognized at the event with an award for Outstanding Employee Campaign Chair. We **raised over \$580,000** thanks to employee and retiree pledges and NOVA's matching dollars!



Sockey Day — Another way we supported the United Way this year was through our participation in *Sockey Day*! NOVA employees and their families attended the Family Day Rebels game and **helped bring in over 4,800 socks** for those in need – smashing United Way's goal of 2,000 pairs of socks!



Steps for Life

In early May, NOVA employees and their families across Canada participated in *Steps for Life* to show our support for, and commitment to, the criticality of working safely every day. NOVA Chemicals is a national sponsor of *Threads of Life* and the important work they do every day supporting families impacted by workplace injuries, illness, and tragedy. We share the belief that people should return home from the workplace every day in the same condition — or better! — than when they left.



Lacombe & District 4-H Beef Sale



Gracelynn Robar won this year's *Grand Supreme Champion Steer* and *Homegrown Grand Champion Steer*. *Richard Guido* was happy to represent NOVA and purchase this steer, in addition to presenting awards during the sale. The 4-H sale is always a great opportunity to support our community.



The NOVA team enjoyed this year's 4-H sale and interacting with all the Club members!

STAY CONNECTED



Sign up for Texts from NOVA!

We've launched **Texts from NOVA** — a proactive communications avenue to share helpful information with community members to keep you in the loop on community events, alarm or Communicator testing, and site activity, like flaring. Texts will be sent from 8 AM – 8:30 PM, as activity dictates.

Texts from NOVA will not be used for emergency situations, our Communicator telephone system will remain the only avenue for these communications. Sign up by scanning the QR code or visiting novachem.com/Joffre



Fall Community Open House

Date: Tuesday, November 19, 2024

Time: 5:30 - 7:30 p.m.

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.)

Agenda:

- Get business and facility operations updates
- Discuss any topic of interest
- Provide your input and suggestions
- Fun science experiments for kids

Refreshments will be served. We hope to see you there!



Joffre Community Advisory Panel

In March NOVA hosted members from the Joffre Community Advisory Panel (JCAP) for our first meeting of 2024. We shared updates on NOVA's operations, sustainability initiatives and community engagement priorities and heard feedback from community members. We've adjusted our in-person JCAP meetings to twice per year, with the addition of site tours to help provide a greater understanding of Joffre Site operations. Following our March discussion, JCAP members toured a control room on site to gain greater insight to operations and how our operators hone their skills through training to ensure things run safely.

We're looking forward to our next JCAP meeting hosted at INEOS later this year. As always, JCAP members are open to hearing your feedback and ideas. You can learn more about the committee at novachem.com/JCAP.

Spring Open House

On April 9 we hosted our annual Spring Open House at Haynes Hall. It was great to connect with so many community members and discuss topics of interest to our near-neighbours!



SiteLine is published by NOVA Chemicals Corporation
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For more information, please see these websites:

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

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