

## Pine Bend Refinery

# Community Update

January 2018

The Flint Hills Resources Pine Bend refinery is a landmark like no other in Minnesota. The tall columns, bright lights at night, and steam clouds on cold winter days can be seen from miles away. Less visible are the more than 1,000 men and women who work hard each day to safely and efficiently make transportation fuels and other products people need.

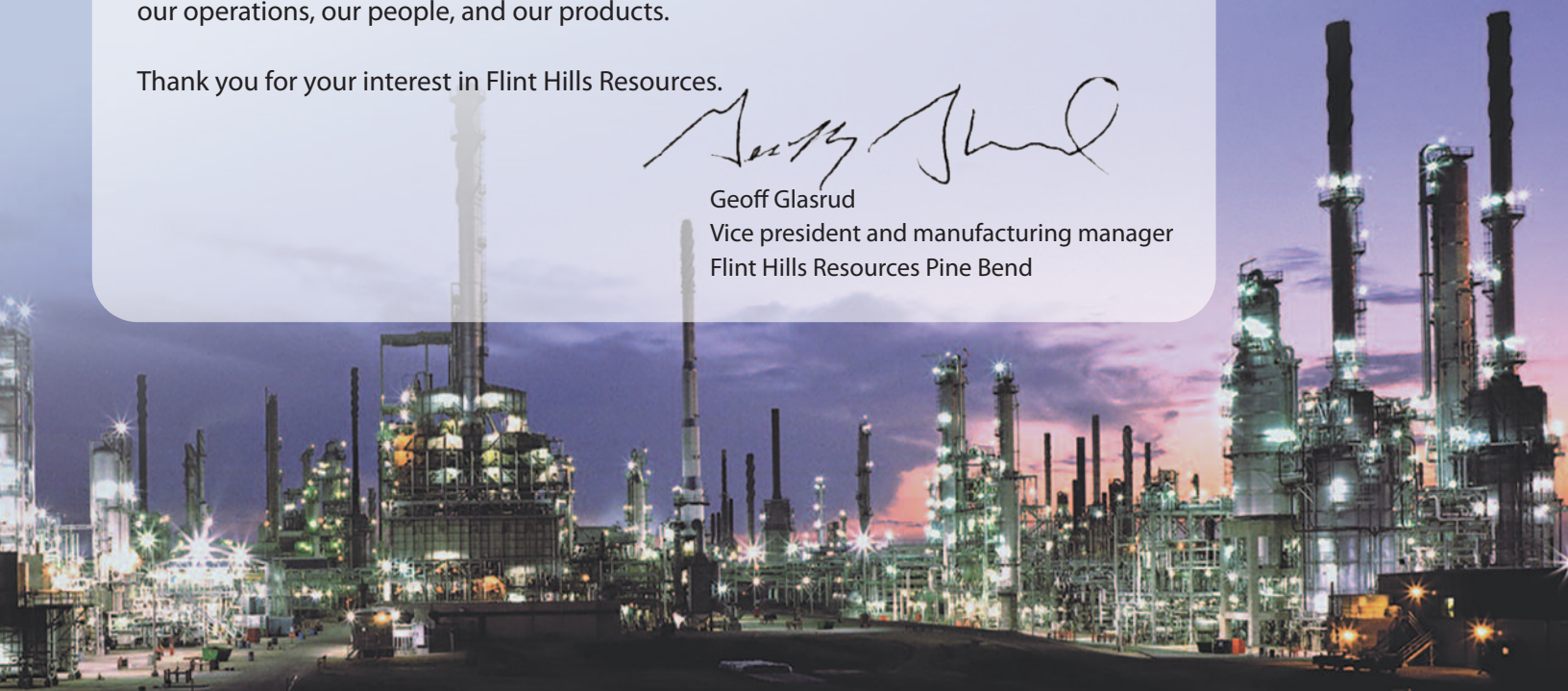
For more than 60 years, the Pine Bend refinery has played a major role in producing transportation fuels used throughout the Midwest, including most of Minnesota's gasoline, diesel fuel, and jet fuel. The refinery also produces propane, asphalt, and heating fuels as well as the chemical building blocks that are essential for products such as plastics, fertilizers, medicines, and synthetic materials.

I invite you to read on and learn more about what we are up to at the Pine Bend refinery and in our community. You can visit our website at [PineBendRefinery.com](http://PineBendRefinery.com) if you are interested in taking a tour of our facility or would like to learn more about our operations, our people, and our products.

Thank you for your interest in Flint Hills Resources.

A handwritten signature in black ink, appearing to read 'Geoff Glasrud'.

Geoff Glasrud  
Vice president and manufacturing manager  
Flint Hills Resources Pine Bend



# Environment, health and safety



## 2017 Energy Star Partner of the Year

Koch Industries and its subsidiaries, including Flint Hills Resources and others, won the U.S. Environmental Protection Agency's (EPA) ENERGY STAR® Partner of the Year Award for 2017 in recognition of its superior energy management practices. This award is the highest honor bestowed by the agency and was presented at a ceremony in Washington, D.C. Pine Bend is one of the most efficient refineries operating in the U.S., and it continues to improve.

*Flint Hills Resources Pine Bend employees gather to celebrate the Energy Star Partner of the Year Award, the highest honor bestowed by the agency.*



## Mutual aid firefighter training

About 25 Dakota County firefighters participated in an elevated rescue training session at the refinery. During the session, firefighters practiced different scenarios on large process units to prepare for rescues in challenging environments. Pine Bend has provided hundreds of free training sessions for fire stations of all sizes since 1991.

**“There is no higher praise to our operations than winning a safety award. Safety is at the core of everything we do at Pine Bend.”**

*Geoff Glasrud, vice president and manufacturing manager of Flint Hills Resources Pine Bend*

## Rail safety

In 2017 the Pine Bend refinery received two awards for strong rail safety performance: the Chemical Safety Excellence Award from CSX Corporation and the Thoroughbred Chemical Safety Award from Norfolk Southern Corporation. These awards recognized Pine Bend for its commitment to safe procedures and consistently transporting product in a safe manner.

## Industry-leading flare performance

At the Flint Hills Resources Pine Bend refinery, flaring is down 80% from its 10-year average. In 2017, Pine Bend had a record 146 days without a flaring event.

## Air quality monitoring

Since 1997, the Pine Bend refinery has lowered key emissions by 69% and its emissions per barrel are 19% lower than other U.S. refineries. The Minnesota Pollution Control Agency (MPCA) maintains a statewide network of air quality monitors, including three monitors near the Pine Bend refinery. These monitors continue to show that air quality near the refinery is well within clean air standards. To learn more, visit [www.pca.state.mn.us/air/minnesota-air-monitoring-sites](http://www.pca.state.mn.us/air/minnesota-air-monitoring-sites).

## Wastewater treatment facility operational award recipient

The Minnesota Pollution Control Agency (MPCA) recognized Flint Hills Resources with an award for maintaining outstanding permit compliance. To be eligible for this recognition, facilities must submit all monitoring reports to the MPCA accurately and on time, demonstrate consistent compliance through monitoring or surveys, and have employees who are MPCA-certified in wastewater operations.



# Innovation and efficiency at Pine Bend



## Science at work

Cleaner gasoline and a new form of liquid fertilizer will result from another construction project currently happening at Flint Hills Resources. The project will allow sulfur to be removed from gasoline and be converted into ammonium thiosulfate, or ATS. This \$150 million project will be completed in 2018.



*When construction of the Combined Heat and Power system is complete, it will use air-cooled condenser technology to save about 400,000 gallons of water per day compared to traditional water-based cooling systems.*

## Improving energy efficiency

Construction is well underway for a new \$150 million state-of-the-art Combined Heat and Power (CHP) system that will allow the refinery to operate more efficiently while reducing greenhouse gas emissions from Minnesota's current energy supply mix.

The CHP system will use natural gas and a heat recovery process to produce approximately 50 megawatts of electricity, or roughly 40% of the energy required to power the refinery. The project also contributes to the State of Minnesota's goal to double the amount of power generated from CHP in the state. The system is expected to be operational in 2018.



*Three new ATS storage tanks are being constructed on Flint Hills Resources property at the southeast corner of Highways 52 and 55.*



# Community partnerships

## Community Advisory Council celebrates 20 years

This year marks a 20-year milestone for the Community Advisory Council (CAC) to Flint Hills Resources. Since 1998, the group has brought together Pine Bend refinery employees and neighbors to communicate and collaborate on important community issues.

The CAC is made up of citizen members from communities near the refinery, Pine Bend employees, and representatives from the Minnesota Pollution Control Agency and the High School for Environmental



*Members of the CAC live in communities near the Pine Bend refinery including those shown to the left in blue.*

Studies. During meetings, CAC members receive updates on what's happening at Pine Bend and provide feedback to Flint Hills employees. This longstanding, open line of communication has helped build a trusting partnership between the Pine Bend refinery and its neighbors.

## Local students receive scholarships

Flint Hills Resources awarded \$65,000 in college scholarships to 26 local high school seniors in June through the Discovery Scholarship program. These talented students were recognized for their strong academic performance, leadership skills, and entrepreneurial vision. Since 1991, Flint Hills' Discovery Scholarships have helped advance the academic careers of more than 450 Minnesota students by awarding more than \$850,000 in total scholarships.







## Families celebrate music, dance and art at the Flint Hills International Children's Festival!



*Approximately 40,000 children, parents and teachers participated in the 2017 Flint Hills International Children's Festival. Flint Hills Resources has proudly partnered with the Ordway Center for the Performing Arts for 17 years to put on this world-class family event.*

### Minnesota Zoo

Flint Hills Resources and the Minnesota Zoo have partnered since 1989 to connect local students with animals and the natural world. In 2017 the partnership supported free field trips for thousands of Dakota County third graders to experience the zoo. During their trip, students followed a syllabus that connected their zoo experience with state STEM curriculum standards.

The partnership also gives young students from greater Minnesota a chance to sleepover at the zoo. During these trips, students participate in interactive learning activities and explore the zoo – many for the first time.

### Clean Air Minnesota

Environmental Initiative this year celebrates the 15th anniversary of Clean Air Minnesota (CAM), a diverse public-private partnership of clean air advocates from all around Minnesota working together to reduce air pollution on a voluntary basis. Flint Hills Resources is a founding member of CAM. Today, Minnesota has some of the best air quality in the country thanks in part to the success of CAM and other Environmental Initiative programs like Project Green Fleet, Project Stove Swap, and its new High-Emitting Vehicle project.



### FOX9 Girls, Science and Technology

Each November at the Science Museum of Minnesota, join Flint Hills Resources' engineers and other inspiring female scientists for a fun event that encourages girls to learn about science and technology through hands-on demonstrations and activities.

*At FOX9 Girls, Science and Technology, kids can meet science thinkers like (from left to right) Chemical Engineer Martina List and Mechanical Engineers Courtney Rau and Megan Berglund.*



# News briefs



## Parade fever!

Flint Hills Resources sponsored and participated in three local parades last summer

where employees and their families enjoyed handing out 15,000 fidget spinners to kids and adults alike. The Flint Hills Resources Pine Bend fire trucks could be seen at Hastings Rivertown Days, Rosemount Leprechaun Days, and Inver Grove Heights Days.



## Car fire simulator donation

Flint Hills Resources recently donated Minnesota's first car fire simulator to fire departments in Dakota County. The donation was made official at an event at the Pine Bend refinery, where Dakota County firefighters demonstrated how the simulator will allow them to practice putting out car fires in a controlled, safe and environmentally responsible way. Inver Grove Heights'



## No project is too small – call before you dig

Flint Hills Resources' pipeline and terminals team laced up their running shoes to support the 811 – 5K Run/Walk at Lake Calhoun in August. The run, which coincides with 811 Awareness Week, is a reminder for people to always call 811 before beginning a project that requires digging. Proceeds from the event were donated to Twin Cities Operation Warm – a group helping firefighters provide winter coats to children in need. To learn more about this free service, visit [Call811.com](http://Call811.com).

## Ed Steele named new fire chief

*The Pine Bend refinery recently named Ed Steele, its new fire chief. Ed has worked at the refinery for 20 years in a variety of roles, from production to safety. Congratulations, Ed!*



Assistant Fire Chief Eric Bergum said, "This state-of-the-art simulator will allow firefighters across Dakota County to be better prepared to protect the public."

The simulator, which will be shared by all fire departments in Dakota County, is a continuation of Flint Hills Resources' long tradition of supporting first responders.

**Explore more at**  
**[PineBendRefinery.com](http://PineBendRefinery.com)**

Visit the Pine Bend refinery website to learn more about the refinery's history, economic impact, and the people who make its work possible. Watch videos on community partnerships and take a virtual tour of the refinery – or sign up for an in-person tour, which are given to community members periodically throughout the year.