FLINT HILLS RESOURCES PINE BEND – ECONOMIC IMPACT

Flint Hills Resources Pine Bend is a leading producer of the transportation fuels that power the Midwest.

Since it was established as the Great Northern Oil Company in 1955, the Flint Hills Resources Pine Bend refinery has played a major role in providing the transportation fuels used in Minnesota and throughout the Midwest. Today, Pine Bend is a leading producer of fuels and other petroleum-based products and is among the cleanest, most efficient and safest refineries in the country.

The refinery uses North American crude oil to produce gasoline, diesel, jet fuel, and other products such as propane, asphalt and heating fuels. The refinery has a capacity of 345,000 barrels per day, or about 15 million gallons.





- More than 1,000 full-time employees, including roughly
 500 members of the United Steelworkers Local 662 Union
- Largest continuous construction site in Minnesota, with hundreds of contractors working onsite on any given day
- Approximately \$200 million in annual maintenance work
- \$1.7 billion in upgrades and improvements to the refinery since 2010



Pine Bend is the largest private employer in Rosemount, and represents a significant portion of the city's tax base

Job Creation. Statewide, Flint Hills Resources employs more than 1,000 full-time workers. Separate studies by Harrah Analytics and the Minnesota Department of Employment and Economic Development estimate that Flint Hills Resources is responsible for supporting more than 5,000 Minnesota jobs.

Investment. Flint Hills Resources recently completed work on approximately \$600 million in new projects at the Pine Bend refinery that are resulting in improved reliability and a reduction in key emissions. In the last 10 years, work at the refinery has been the equivalent of building at least two Vikings stadiums. During much of that time, Pine Bend's average daily construction workforce exceeded the number of people who worked at the Minnesota Vikings stadium during peak construction.



State-of-the-art innovation. Flint Hills Resources Pine Bend refinery is making several major investments to improve its efficiency and help lower emissions, including a state-of-the-art Combined Heat and Power system and an Ammonium Thiosulfate project that will convert sulfur to liquid fertilizer and help lower vehicle tailpipe emissions.

New work spaces. Flint Hills Resources opened two new buildings that provide additional work space for employees and contractors. A new 135,000-square-foot administration building provides space for 500 engineers, designers, and construction managers. A new high-tech test laboratory is used by scientists to perform about 35,000 product quality tests each month.

New technology and improved efficiency. In an effort to improve reliability, reduce key emissions, and improve its ability to convert crude oil into transportation fuels, Flint Hills Resources recently completed work on approximately \$600 million of improvements at the refinery. The projects included updating equipment with new technology, making the refinery more energy efficient, and improving other refinery process units.

Combined Heat and Power (CHP) system. Flint Hills recently constructed a state-of-the-art CHP system that allows it to operate more efficiently while reducing greenhouse gas emissions from Minnesota's current energy supply mix. The CHP system uses 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 approximately \$150 million project also contributes to the state of Minnesota's goal to double the amount of power generated from CHP in the state.

