Our History

When Whiting Refinery processed its first petroleum products in 1890, this helped bring nearby Chicago and other Midwest areas into the new world of petroleum-based energy.

In the late 1800s, when most people still traveled by horse, train, or boat, the refinery sold mostly kerosene, and its gasoline production was considered no more than a waste product. That perception changed quickly, of course, and the rapid growth of automobiles propelled the facility into what is now the largest inland refinery in the U.S. and the nation's fifth largest refinery.

The initial capacity at Whiting, 17,000 barrels a day within a year of operation, was large by the standards of the 1890s, and has progressively grown to today's 405,000 barrels a day of processing capability.

Below we detail BP Whiting Refinery's amazing journey.

May 1889:

Construction of the refinery begins on 235 acres of land.

November 1890:

The first shipment of finished petroleum product, 125 tank cars of kerosene, is shipped from the refinery. At this time, gasoline was considered a waste product, and was often discarded.

January 1913:

New 'thermal cracking' stills begin operation at Whiting. Whiting Refinery's own engineers discovered that, by incorporating pressure and high temperatures, they could more than double the gasoline output from each barrel of crude oil. Initial production was 8,000 gallons per day.

During World War I:

Standard Oil Company licenses its thermal cracking process to the rest of the U.S. industry to increase gasoline production for the U.S. war effort. Result: The result was 12 million barrels of gasoline in 1918 vs. 2 million in 1914.

1923:

Another major breakthrough occurs at Whiting Refinery in 1923, when engineers discover that adding tetraethyl lead to gasoline enhanced the performance of gasoline engines, and removed power-robbing 'knock' from automobile engines.

1941:

Research at Whiting Refinery leads to the discovery of a process that made high-grade aviation fuel out of low-octane naphtha. The discovery came just four days before the bombing of Pearl Harbor.

During the war, Whiting Refinery researchers also developed a new all-weather heavy-duty motor oil.

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Our History (Continued)

1959:

Construction is completed on the second, and larger, of two crude oil pipe stills at Whiting Refinery. The new unit can distill 140,000 barrels of crude oil per day, which is more than twice the size of the pipe still built only three years earlier. [Today the No. 12 Pipe Still, considered the heart of the refining operation, is capable of distilling more than 250,000 barrels of crude per day].

1969:

Whiting becomes the first refinery in the petroleum industry to add a third (tertiary) stage to its water treatment facility. The tertiary stage injects air into refinery waste water to bring the impurities to the surface where they are collected and removed.

1972:

Whiting's No. 4 Ultraformer begins operation. Ultraforming is a process whereby the molecules of the gasoline product are ‘reformed’ to produce a high-octane gasoline product that contains no lead.

1977:

In June 1977, Whiting establishes an all-time production record for the refinery by processing 504,000 barrels of crude oil in a 24-hour period.

1987:

Whiting's Total Isomerization Process unit begins operation. The Isomerization Unit upgrades lower octane light naphtha by rearranging its molecular structure. As a result, higher octane products are attained, some by at least 15 octane numbers.

1993:

The Distillate Desulfurizer Unit is built to provide low sulfur diesel fuels. This process removes sulfur down to the 0.05 weight percentage limit required for highway diesel fuels. Whiting Refinery's older Desulfurization Unit was only capable of removing sulfur down to the 0.3 weight percentage limit for off-highway uses such as agriculture.

1999:

Whiting becomes part of the newly merged BP Amoco Corporation. BP Amoco introduces new cleaner premium gasoline.

2001:

In 2001, Whiting Refinery becomes the first refinery to introduce low-sulfur diesel fuel to the Chicago-area, well before the EPA mandate.

The ‘Whiting Clean Energy Project’ is also announced in 2001. The project, a partnership between Primary Energy of Merrillville and BP, would generate up to 525 MW of electric power, and high-pressure steam for refinery use.

2006:

In June 2006, Whiting Refinery starts-up its new Distillate Hydrotreating Unit to produce Ultra Low Sulfur Diesel fuel. Jacobs Engineering conducts the detailed engineering, and Regional Contractors Alliance the construction work on the $128 million project.

In September 2006, Whiting Refinery leadership announces a massive modernization project alongside Indiana Governor, Mitch Daniels, at Purdue University’s Calumet Campus in Northwest Indiana. BP announces that the multi-billion dollar project would modernize Whiting Refinery for the processing of heavier crudes.

Our History (Continued)

2008:

In May 2008, after necessary permits were issued, BP began construction on the Whiting Refinery Modernization Project.

Some project highlights:

- **Environmental Improvements:** $1.4 billion of the $3.8 billion modernization project has been dedicated to environmental improvements.
- **Gas Oil Hydrotreater:** a modern hydrotreater will remove more sulfur and nitrogen from gas oil.
- **Sulfur Recovery Complex:** the existing sulfur recovery capabilities are being enhanced to create a more efficient system that will remove more sulfur from our fuels product streams.
- **Petroleum Coker:** a new state-of-the-art coker is being built to replace the existing one. The new coker will enhance process safety through increased automation, increase petroleum coke production, and produce more naphtha.
- **Distillation Unit:** the refinery's largest crude distillation unit is being reconfigured to process heavier crudes, helping to replace some of the light sweet crude that is becoming more difficult to source.

In July 2008, BP Alternative Energy acquires Whiting Clean Energy from NiSource, Inc. The Whiting Clean Energy facility provides a reliable and consistent supply of steam and electricity to Whiting Refinery from cleaner natural gas. The acquisition of Whiting Clean Energy also offers BP the opportunity to sell lower-carbon power into the local power market.

In July 2008, BP Whiting Refinery opens up the 'Indiana Learning and Development Center' in Hammond, Indiana, creating a new training facility for Whiting Refinery employees and contractors.

2009:

The modernization project continues. As of December 2009, the project is 38% complete. This includes detailed engineering, procurement and construction activities.

2012:

BP's 'Whiting Refinery Modernization Project' is scheduled for completion by mid-year 2012.