



Imperium Grays Harbor Fact Sheet

Facility & Employees:

The facility is sited on a 12.86 acre parcel of land at the Port of Grays Harbor, Washington. The production facility (not including the tank farm) is roughly 68,000 square feet. The facility currently employs 42 full time employees in a wide range of positions.

Storage Tanks:

The tank farm consists of 14 “field erected” tanks totaling 18 million gallons of storage. The eight main storage tanks are 80 feet in diameter and stand 65 feet tall. Each tank can hold up to 2 million gallons of either vegetable oil or biodiesel. The tanks are supported by massive, three-and-a-half foot thick concrete foundations, each one totaling 1000 cubic yards of concrete supported by 185 piles driven 75 feet into the ground. The tanks are constructed of carbon steel and designed to meet the standards set forth by the American Petroleum Institute (API 650).

Other Tanks & Vessels:

The facility also has three “field erected” tanks in the process area, as well as 29 “shop fabricated” vessels ranging from the small air receiver tanks to the large Transesterification Reactors.

Piping & Pumps:

Connection between all the various equipment is achieved through an elaborate network of roughly 70,000 linear feet of piping, from short runs of 72-inch-diameter to the main lines of 16 inch and smaller. Over one million pounds of structural steel was erected to secure and support the vast network. All piping was designed and fabricated in strict accordance with the standards set forth by the American Society of Mechanical Engineers B31.3, Process Piping. There are 79 pumps in facility, ranging from small ½ horsepower sump pumps to large 250 horsepower pumps capable of moving 3,600 gallons per minute.

Operations Building:

The facility is operated from the Control Room with a sophisticated Distributed Control System (DCS), which directs and monitors nearly all processes associated with biodiesel production, including: unloading of feedstock & process inputs; outloading of biodiesel to trucks, rail cars and tankers; status of all machinery and equipment; management of safety interlocks; reaction progress & production rate, etc. The operations building also houses the Motor Control Center (MCC) room, where electricity is distributed to over 100 motors and various equipment throughout the facility via 209,000 linear feet of conductor cable.

Rail, Barge, & Transfer Info:

The site is strategically located at a port to take full advantage of tri-modal transportation, i.e. water, road, & rail. Imperium has added nearly a mile of new track and performed extensive upgrades to the Port's existing rail line and utility infrastructure. The rail yard consists of four parallel tracks capable of accommodating a 90-car unit train. A separate track is dedicated for unloading process chemicals, designed to provide full containment in the event of a spill. Waterway transportation is achieved at port terminals 1 & 2. Imperium has constructed over 5,000 feet of piping from the tank farm to the terminals to enable the delivery of vegetable oil and biodiesel from/to tankers and barges.

Feedstock:

The facility is feedstock neutral, meaning it can create biodiesel out of a number of different vegetable oils. Since the opening in August 2007, 100 percent of the feedstock in the tanks has been Canola oil from North America.

Facility Development

- Engineering & Design: Imperium Renewables
- General Contractor: J.H. Kelly, Inc.
- Project oversight: Saybr Contractors, Inc.