

Blue Flint Ethanol E85 Blending Facility



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Price impact

Pricing of E85 is driven by several factors, market value of ethanol, market value of gasoline, the difference between these two, freight costs, and margin or mark up. The blending skid has allowed the freight component of the blending to be reduced by 2 to 20 cents per gallon of E85. This range of values is dependent upon volume of product, distance to market, and matching product movement with additional products moving to the same market area.

Facilities installing blender pump infrastructure will see freight advantages that can be passed on to the end user of the E85. This will also allow for competitive pricing when the price spread between ethanol and gasoline narrows making it difficult to sell E85. This advantage should lead to additional gallons of E85 sales within the state.

Market Expansion

To date there has been little market expansion since installation of the blending skid at BFE. This has been primarily due to the market pricing for ethanol being at a premium to gasoline. This makes E-85 less cost effective for consumers. Over the past two months this has changed and gasoline is now selling at a premium to ethanol. Since this market change has occurred our volume has increased by approximately 30%.

Market expansion is still limited by insufficient E85 retail pump infrastructure in the state. There are presently approximately 30 E85 pumps in the state. The 2008 / 2009 ND Legislature passed Senate Bill 2228 which approved funding for grants to install bio-fuel

blender pumps at fuel retail locations in the state. This bill will provide grants for blender pumps. These blender pumps will allow retail stations to purchase E85 directly from Blue Flint or other blenders to be used to blend with gasoline to produce E10 (10% ethanol), E20, and E85. This should provide significant market expansion for both ethanol and E85 in the state.

Penetration

Additional market penetration has been limited due to market drivers and infrastructure at the retail level. We anticipate the blending skid to provide additional opportunities for market penetration as we pass through the summer driving season and as the blender pumps begin to get installed throughout the state. No other specific data is available on market penetration.

Quality Control

The technology that was used for the E85 blending skid installed at Blue Flint Ethanol was a ratio blending system that is a much more efficient way of blending than splash blending. Gathering quality data from a splash blending batch of E85 before it leaves the site is very poor as it will blend better as the truck drives to its final location. Splash blending is simply “topping off” one product with the additional ratio of the other blended product. Ratio blending at the skid blends the 200 proof ethanol or E98 with the denaturant or natural gasoline by metering each product as it enters the skid and is transferred into the truck. This allows the blend facility to blend any ratio of ethanol and gasoline that is desired. Blue Flint Ethanol lab samples every truck that is filled before it

leaves the site and the results show that on average the samples are within one percent of desired ratio. By installing this blending skid we have a much more efficient way of blending ethanol which provides a product that is superior to a splash blended product.

Customer Satisfaction (blended vs. splashed)

The blending skid system allows for the ability to supply accurately blended product from a certified metering system. This in turn provides the retailer fuel station confidence that the product they are selling meets the seasonal and all other blending requirements for E85. This also assures the end user will have a proper blend for the different seasons of the year that require three different blend ratios of E85 to be blended to allow for proper starting in colder climates. This leads to higher customer satisfaction in their use of E85.

Since installing the blending infrastructure Blue Flint has not been made aware of any consumer complaints of E85 product that was blended and marketed by this facility.