

## 1.0 psi RVP Waiver Implications

**Background.** Eight midwestern governors petitioned the Environmental Protection Agency (EPA) to remove the federal 1 psi Reid Vapor Pressure (RVP) allowance (commonly referred to as the "1-pound waiver") in their states. The 1-pound waiver facilitates the blending of gasoline with 10% ethanol. If implemented, gasoline currently sold in much of the country during summer months will no longer be offered for sale in these states. Instead, a new low-RVP regional boutique fuel would need to be produced and sold. AFPM commissioned an analysis by Baker & O'Brien that found this Midwestern boutique fuel could cost more to supply the market, require investments in the fuel supply chain infrastructure, and increase supply disruption risks.<sup>2</sup>

- Eliminating the 1-pound waiver could cost the Midwest \$500 \$800 million in the first summer alone.<sup>2</sup>
  - The cost to produce, store, and distribute a unique Midwestern fuel that must be segregated from other fuel is expected to **range from 8 to 12 cents per gallon (cpg)** in the near term.<sup>2</sup>
  - The estimated total incremental cost to supply a new boutique gasoline in the affected states **ranges** from \$500 \$800 million, and a supply disruption would push **costs to \$1.1 billion**.<sup>2</sup>
- Eliminating the 1-pound waiver is likely reduce overall fuel production in the affected states.<sup>2</sup>
  - Fewer refineries in the region will be capable of supplying Midwestern summertime gasoline. Refinery and supply system constraints are estimated to result in approximately up to 125,000 fewer barrels per day of in-region gasoline production and up tp 33,000 fewer barrels per day of in-region diesel fuel production during the summer equivalent to an outage at a large Midwest refinery.<sup>2</sup>
  - Capital improvement costs are estimated at \$50 \$75 million per facility where required.<sup>2</sup>
- Eliminating the 1-pound waiver puts the Midwest at greater risk of supply shortages.<sup>2</sup>
  - Lower fuel production in the region will be made up by fuel **supplied from Gulf Coast refineries**, which is transported to the Midwest by pipeline.<sup>2</sup> Adding two new low-RVP grades (regular and premium) limits the capability of the fuel supply system to respond to a supply disruption.
    - In the event of a disruption (e.g., hurricane, refinery outage), the affected states could experience more frequent and longer supply disruptions and a higher risk of price spikes and shortages.<sup>2</sup>
  - Recent history shows that price differences between RFG (an even lower-RVP blend) and conventional Midwest gasoline can reach 60 cpg in the event of a disruption.<sup>2</sup>
- Implementation requires lead time.
  - PADD 2's refining complex evolved to serve conventional gasoline markets under the 1 psi ethanol waiver.
  - As a result, refiners and pipelines cannot readily produce and segregate high and low RVP gasolines. To do so would require investments that **typically take two years** to complete.
  - Typically, refiners transition to summer grade fuel in February, and pipelines in March to meet the deadline for supplying summer grade fuel at the pump.

<sup>&</sup>lt;sup>1</sup> Wholesale conventional summer gasoline may not exceed 9.0 psi RVP per CAA 211(h). The addition of 10% ethanol generally increases RVP by 1 psi, (*i.e.*, to 10 psi). CAA 211(h)(4) provides a 1.0 psi RVP allowance for 10% ethanol blends.

<sup>&</sup>lt;sup>2</sup> Baker & O'Brien, Inc. Midwest States Gasoline RVP – 1 psi Waiver Study.