

Appendix 7

NON-CONFIDENTIAL

US PVC pricing and distribution model

Pricing

Market monitoring services such as CMA¹ or Platts² label their prices under ‘US domestic’ for the domestic price or ‘FAS Houston’ for export.

Both providers clearly distinguish between prices for the domestic market and export prices.

The following graphs highlight data published by CMA:

[The graphs have been redacted as they are subject to copyright. By way of non-confidential summary, the graphs highlight the pricing of PVC reported by CMA. The graphs show that CMA reports US domestic prices and US export prices separately.]

The ‘PVC Contract Index, Delivered’ refers to the US domestic contract price, whereas the ‘PVC Spot Export, FAS USGC’ is the US spot export price.

Platts also makes a clear distinction between the US domestic contract price, reported as ‘delivered railcar US domestic’ and the export price, ‘Spot FAS’³:

Polyvinyl Chloride						
PVC Susp FAS Houston Weekly	USD	PHAIT00	PHBAM03	Spot	FAS	Houston
PVC Susp US Domestic Delivered Railcar Weekly	USD	AASIX00	AASIX03	Contract	Delivered Railcar	US Domestic
PVC Susp US Domestic Delivered Railcar Weekly	USD	AAGZR00	AAGNP00	Contract	Delivered Railcar	US Domestic

It is trusted within the industry that the reporting agencies’ prices are reliable. These prices are used as a basis to set price levels in contracts, so it is very important that the prices are a true reflection of the market.

The ‘domestic price’

Pricing agencies publish contract reference prices once confirmation is obtained of at least two agreements between recognised contract partners of significant size. They reflect the base price for contractual sales of material by producers.

For example, according to Platts pricing methodology: “weekly domestic assessments are based on contract pricing for large US buyers and reflect settlements and negotiations between

¹ CMA, Chemical Market Analytics

² Platts, S&P Global

³ See Platts, “Specifications Guide Americas Chemicals” (August 2023), page 11, accessible at: https://www.spglobal.com/commodityinsights/PlattsContent/_assets/_files/en/our-methodology/methodology-specifications/americas-petrochemicals.pdf

producers and buyers through the course of the delivery month. Assessments reflect material delivered by rail."

Agreed contract prices are a 'base price' from which discounts or premiums are given to individual buyers. The size of these discounts typically varies based on the volume purchased over the contract period by the buyer. The Applicant has provided market intelligence estimate that discounts range between 5-25%. To be conservative, the Applicant has removed 25% from the domestic price.

Distribution model

The Applicant does not have production in the US and thus do not have first hand knowledge of the market structure. However, the Applicant understands that the US PVC export market is largely based on a trader distribution model whereby traders in the US purchase PVC from US producers for export.

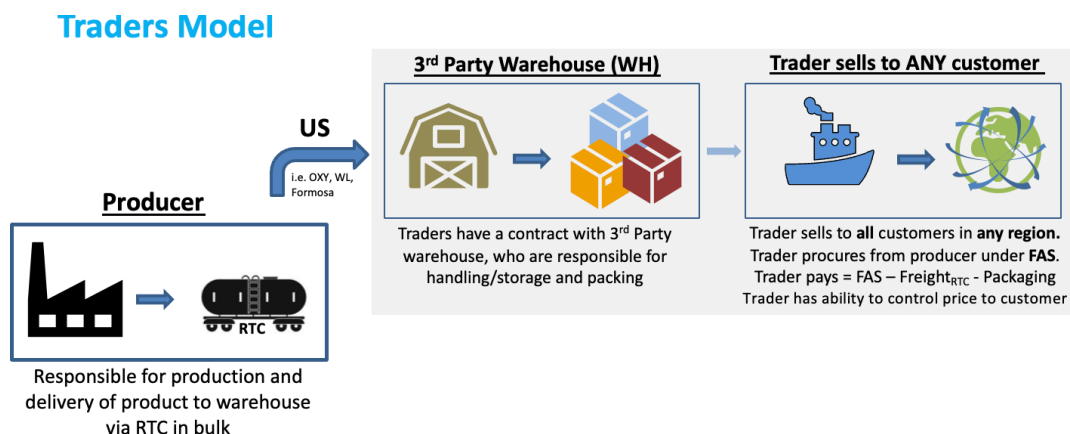
Producers only use traders for sales destined for export markets. Domestic market sales do not go through traders. This largely because:

- i) If traders were to receive prices at ex-works (below FAS Houston) and then sell into the US market at domestic prices, traders would make over a \$500 margin that the US producer could have made. US producers ensure that goods sold to traders at ex-works prices cannot be sold domestically. If the trader sold domestically, the producer would refuse to sell to that trader going forward.
- ii) If a trader or US producer were to sell into the domestic market at export prices (around half that of the domestic price) it would erode the domestic price margin they have created in the market. This would hurt the US producer, so there is no incentive for them to do this.

In addition, it is the Applicant's understanding that generally, contracts are in place between US producers and traders to ensure that the product is exported out of the US market and is not sold on the US domestic market. Mexico and Canada are considered domestic markets for American producers, thus traders cannot sell to these locations.

Trader distribution model for export

The following flowchart sets out this trader distribution model:



US producers load rail cars and sell product to traders. US producers sell their exports to traders on an ex-works basis and the rest of the export price is determined by traders who export on a FAS Houston basis.

There is usually an intermediate 3rd party warehouse used and paid for by the traders. The rail car goes to the 3rd party. At this location the cargo is unloaded, stored and bagged. The trader is then able to sell/distribute the cargo to any customer.

According to Applicant market intelligence, traders will take ownership of risk or liability of the product they export. They develop a customer base for the product whereas the supplier has limited control over activities such as pricing, markets, customers, branding and promotion.

This trader distribution model is adopted by all US producers with the exception of Shin-tech. Shin-tech also sells through traders but they have a clearer distribution policy, so they remain in control of packaging and shipping arrangements. Traders buy product from Shin-tech on a CFR basis which includes the trader's commission. However, Shin-tech mainly distributes PVC to the China/Asia market. Thus, the Applicant considers that US exports to the UK are predominantly via the trader distribution model explained above.

Traceability

Product is sold by the producer to the trader in bulk via rail car. Bulk material is unloaded into silos at the warehouse and then filled into plain bags of different sizes. These plain bags only have the grade name and Lot number on it. Lot number is an identification number assigned to a particular quantity or lot of material from a single manufacturer. The trader will not change the grade name/brand name on the bag in fear that they cannot get the quality guarantee from the supplier. The grade name and lot number are also present on the COA issued by the supplier for each rail car Lot. This allows the traders to trace product back to the supplier in the case of customer complaints on product quality etc. Country of origin can also be used to trace back to supplier.