By Bill Wilson
Editorial Director

Expensive painting

Contractors take another material price hit

Storing a heavy order of traffic paint under a mattress sounds downright silly, if not impossible.

Sleeping next to it certainly is not out of the question, and it probably was just the measure one highway contractor in Richmond County, Ga., considered.

The builder was looking for a secure spot for the reflective lane markers in mid-June, and was open to suggestions when he called Steve Cassell, a traffic engineer for the county.

"I'm like, 'Really? Who is going to steal striping? Just keep it in your hotel,'" Cassell told the *Augusta Chronicle*. "But he said there is a shortage of it and this stuff disappears."

It is a sudden disappearing act that many contractors in the U.S., and the world, were hoping would just go away as the summer construction season reached its peak performance. However, the traffic-paint shortage was showing no signs of fading heading into July, and stripers like Chip Sterndahl were already seeing the effect—clear as day.

"The timing of it could not be worse," the owner of Sterndahl Enterprises Inc., Sun Valley, Calif., told ROADS & BRIDGES. "We are just hitting stride in a season that everyone across the country really needs, and here we go, we just had been hit with a price increase [on traffic paint] and the potential for not being able to get material at any price."

Staying under water

If the traffic-paint shortage is the result of a perfect storm, like many in the industry are saying, then it blew in from the east, the Far East to be exact, and marked the second time in less than two years road builders found themselves sandbagging for the worst. Shortages of key raw materials in China used to make paint, thermoplastic and epoxy—acrylic resin, rosin esters, liquid epoxy and titanium dioxide—were perhaps the main drivers of this dangerous front. Then, in early May, Dow Chemical experienced production problems at its methyl methacrylate (MMA) manufacturing unit in Deer Park, Texas, resulting in a partial shutdown. According to Dow

Chemical Senior Public Affairs Leader Rebecca Bentley, the issue was resolved and "contrary to recent and erroneous media reports, the plant is back on line . . . [and] achieved a full manufacturing rate on May 16," she said in an e-mail statement to Roads & Bridges. Bentley added that Dow's total production loss during the incident was equivalent to less than 2% of the annual production capacity in the U.S.

Poor supply and increased demand caused traffic-paint prices to spike as much as 30%, and at press time many believed the nastiest rates were still on the way, which only increases the pain inflicted from the first man-made disaster contractors had to endure in 2009—the crippled economy.

With so many desperate for work and projects rolling in from the American Recovery and Reinvestment Act, the average bid price for a road and bridge project in the U.S. was coming in at about 60% under the engineer's estimate. In order to compete, many dropped their prices to uncomfortable levels, and will now be forced to take the hit from the inflated traffic-paint prices.

Sterndahl was already buying thermoplastic at about $1,350 a ton in June, up from $1,200 a ton, and was told to anticipate another $25 hit.

"It would not hurt so bad if in the past three years we'd been in a situation where the market price in the industry allowed for some contingencies in the market price the work has been going for," said Sterndahl, who was asked how he felt about taking the price hit after coming out of a depressed economic climate. "It's anger, it's frustration, it's a whole gamut of emotions."

Many state DOTs looked like they were sympathetic toward Sterndahl and his colleagues. It did not appear that contractors would be penalized for jobs that were completed late due to the traffic-paint shortage, and a few DOTs, like Iowa, Illinois, Texas and Virginia, already had action plans in place. Virginia, Illinois and Iowa were encouraging the use of alternative traffic markings, like traffic tape.

"Our materials engineers and our traffic engineering folks were aware of this coming and put some time into thinking about these alternatives," Jeff Caldwell, spokesman for the Virginia DOT, told Roads & Bridges. "From the people they are talking to they are not looking at this shortage as being a super long-term thing, so in the short term we thought these alternatives would carry us through just fine.

"We are not holding any projects back and we are not facing any delays due to the shortage," he added.

The Texas DOT discussed the traffic-paint shortage at the Associated General Contractors of America's Joint Committee meeting in late May and issued the following directives (effective June 8 through Dec. 31) for both smooth pavements and seal-coat operations:

- Maintenance striping was to be deferred when practical;
- Work-zone pavement striping was to be replaced with raised buttons/reflectors;
- Temporary tabs were being allowed past the normal 14-day limit as necessary for overlays and spot maintenance work, along with additional warning signage;
- Chip seals were to be constructed with raised reflective pavement markings as usual, but the sealer and thermoplastic striping was to be deferred until a later date with the concurrence of prime and subcontractors. Some will be deleted from existing contracts and re-let under stripe-only contracts; and
- With smooth pavements, additional warning signage will be paid for until the final striping is down.

Years ago, Caltrans formulated price fluctuation indexes for the asphalt industry to help deal with the volatility of the price of another material: oil. However, applying such a framework to traffic paint and thermoplastic would be a long process and most likely would not be considered by Caltrans or any other state DOT.

The pavement-marking shortage, which also affects airports, is expected by many to last this construction season. However, some are saying it could run longer.

Re-striping strategy

Contractors and traffic-paint suppliers also were looking at ways to change their business behavior, whether temporary or permanent.

In the anticipation that many suppliers were going to allocate material to those customers that paid on time,

Sterndahl was going to turn around and use the strategy on his clients.

"Those customers that are in good standing in terms of payments on time, we are going to try to take care of them," he said.

Sterndahl Enterprises also is keeping a sharper eye on the inventory. At the time of the interview, the contractor was prepping for a striping job at Travis Air Force Base, one that called for water-borne airfield marking paint.

"I don't want to end up getting more airfield paint than I really need and have it upset highway paint that I might need in terms of volume of paint I can get from my source," Sterndahl said.

"In the past we would take a look at this and go, a couple of thousand gallons is what is going to do it so let's go ahead and order 1,250 gal of yellow and 1,250 gal of black and so on and so forth, but I am looking at this more carefully because I don't want to end up completing this particular segment of the work and having 500-1,000 gal of paint left over for airfield marking that I can't use on the highway."

Sterndahl is trying to inventory more material ahead of the project start time. His company also is about to embark on a job on I-5 in Orange County, Calif., that will require 220,000 lb of material, and the paint order was placed a month ago and has been sitting in storage for two weeks.

"When you know you are going to have allocated material it is a careful dance," he said.

Paint suppliers ranging from the giants to the more moderate operations are trying not to step on their customers' toes.

Tom McSwain, director of government relations and Eastern U.S. sales manager for Ennis Traffic Safety Solutions, said his company absorbed the traffic-paint price increase from the end of March through May until it was no longer feasible.

"We tried to mitigate it as much as we possibly could knowing that the subcontractors were under the gun, but at the same time we could only absorb so much of it," he told Roads & Bridges.

McSwain has seen a 10-20% price increase so far, and believed they were going to jump another 10% before leveling off.

"We are seeing [epoxy] at $7-11 a gallon," he said. "The average price had been 0.80-$1 a gallon."

As an industry, McSwain advised suppliers to be more mindful of inventories and the jobs that are out there. Manufacturers also will have to be more careful when determining how far out they are willing to commit pricing on.

Flint Trading is already tuned into this new business bandwidth. Because it is a relatively small company, Flint, which produces preformed thermoplastic and other striping products, faced pricing pressures every year.

"It is our normal course of business," Dan Lang, vice president of business development for Flint Trading, told Roads & Bridges. "Every year we get closer to the edge, and our operations people have done a great job in keeping a very close ear to the ground."

Lang said Flint stocks up heavily on product well before the construction season gets into high gear. About 95% of Flint's products go out within 24 hours of order placement, so having material readily at hand is critical. Lang said at press time that his company is experiencing some extended lead times from suppliers, but since Flint Trading always cushions its schedule none have missed their delivery dates. Flint passed along a nominal price increase, less than 5%, earlier in the year and is attempting to hold its current pricing.

"Given the market condition there is no guarantee in that," said Lang.

Just how long?

The duration of this traffic-paint crisis covers just about the entire spectrum. Most believe it will last through the current construction season. Sterndahl, however, thinks it may last well into the later half of 2010.

"We are not hearing that it is going to ease up by the fall. What we are hearing right now is you better get your orders in early and you better pay your bills on time."

Then there are the prognosticators like Lang, who sees the crisis continuing to pop up over time.

"One of the key parts to this is we are pressured by oil pricing, and if you look at energy you are going to see this continued pressure for these types of materials indefinitely.

"I do not believe it will be as severe, but you are always going to see this demand because some of these products historically have been interchangeable. These raw materials show up in a lot of different places. There is a worldwide demand." **R&B**

FHWA offers possible strategy for state DOTs

The Federal Highway Administration (FHWA) did release a briefing on the pavement-marking shortage and offered guidance to state DOTs on what to do if a contractor is having problems completing a job due to the supply issues.

If a contractor is indeed experiencing difficulty receiving the product, the DOT must verify the following:

- The contractor had a written commitment to supply the specified pavement-marking material in a manner that corresponds to the contract time;
- Written statements are available from the original supplier that they are no longer capable of supplying the specified pavement-marking material and quantity required to meet the contract time; and
- Documentation indicates that the contractor is unable to supply material from all practical sources.

The FHWA also recommends that state agencies consider using alternative pavement-marking materials, and if they do have their own pavement-marking supply to offer it to contractors at a price. DOTs also could eliminate pavement-marking items from a contract or delay contract lettings until the material is more available and ask the contractor to apply the markings at lighter rates and delay edgeline markings.