Before the
United States International Trade Commission

Sodium Nitrite from China and Germany

Inv. Nos. 731-TA-453, 731-TA-1136-37 (Final)

TESTIMONY OF DOUGLAS MCFARLAND

Good morning. I am Douglas McFarland, Director of Business Development and Technology for General Chemical LLC. I am honored to appear before the Commission this morning on behalf of General Chemical, LLC, the sole remaining U.S. producer of Sodium Nitrite.

I have been with General Chemical since 1993. I have progressively held line and management positions in production, finance, general management and business development. I have worked primarily in the chemicals and food & pharma business area and have been involved in many manufacturing operations including water treatment, soda ash and, of course, the sodium nitrite business we are discussing today.

assumed my current position as Director of Business Development in 2005. My responsibilities include acquisitions for the Performance Chemicals Division. Consequently, was directly involved in the Repauno transaction in 2006.

First, I would like to talk about the product and the production process.

Sodium nitrite is a simple inorganic salt with the chemical formula $NaNO_2$. It is primarily used as an intermediate or process chemical. The end user values the sodium nitrite for a variety of reasons including as a source of nitrous acid (in inks and dyes), because it is a strong oxidizing agent (water treatment), because of its high melting point (heat treating salts), and because it is used as a food preservative.

We are passing around samples of various forms and grades of sodium nitrite. The first sample is granular sodium nitrite without any anti-caking agent. This form will solidify within two or three months in a 50-pound bag, and you will have a brick of sodium nitrite which is very difficult to use. You can see that the sample in the jar is already becoming solid.

The next sample is "granular, free flowing" sodium nitrite. Upon examination, you will see that this granular form is very fine and flows in the jar like sugar. This form has an anti-caking agent added to the granular sodium nitrite to prevent the material from solidifying into a solid brick.

The next jar includes the "flake" form. In this case, the particles of sodium nitrite are much larger and irregular in shape. Flake sodium nitrite does not stick together because of these physical characteristics and therefore does not need any additional anti-caking agents.

Next we are passing around a bottle of Chinese sodium nitrite, which is "prilled" in form. This is another way to provide a form that is free flowing.

Finally, we are passing around a bottle of sodium nitrite in liquid solution. Putting the product into solution form is yet another way to prevent it from caking.

Also, as I will explain, virtually all end users will put sodium nitrite into solution even if they do not buy it in liquid form.

End users of sodium nitrite essentially want the sodium, nitrogen or oxygen for use in their production process. For example, in water treatment applications, the end user wants the sodium nitrite because it is a very strong oxidizing agent. This means that sodium nitrite will cause oxygen to bond with the sodium nitrite instead of bonding with the metal pipes. This process keeps the iron pipes from rusting.

Another one of the uses of sodium nitrite that you see on the table is in antifreeze. Sodium nitrite will keep your radiator from rusting.

In other applications, an end user may want a source of nitrous acid. However, shipping nitrous acid is not practical because it is not stable to ship. The nice thing about sodium nitrite is that it can be easily transported. We can ship it in liquid form in tank cars, or we can ship it in dry form in supersacks or 50-pound bags.

The different forms of sodium nitrite can therefore be understood from the standpoint of customer convenience.

Slide shows all of the different categories of customers by end use. In all but two cases, General Chemical ships dry and liquid sodium nitrite to end users in each category.

In the case of imports from Germany or China, it is impractical to ship sodium nitrite in solution form because of the additional freight cost to ship water. Consequently imports are exclusively in the dry form.

However, once the end user receives dry sodium nitrite it will be put into solution in the large majority of applications. In fact, the dry form of sodium nitrite will always substitute for solution. We know this because we make the dry granular form in our plant, and we dissolve it in water for customers that want solution.

Our plant is located in the town of Solvay, which is on the outskirts of Syracuse. Manufacturing at the site dates back to 874, with one of the first operations being the production of soda ash. This led to the plant manufacturing sodium nitrite starting in the 1920s with a major capacity expansion in the 1960s.

Our Syracuse operation is one of the longest producing sodium nitrite operations in the world, and chemical manufacturing at the site dates back to the beginning of the chemical industry in America. I see no reason, with fairly traded competition, that we cannot continue to produce sodium nitrite for the next 100 years.

The next slide shows the production process. Our process is typical of the sodium nitrite manufacturing process in which two chemicals — either ammonia and soda ash (General Chemical & Chinese producers) or ammonia and caustic soda (BASF & Repauno) are reacted to form a sodium nitrite solution.

The first step involves oxidizing ammonia with air to produce nitrogen oxides over a very hot catalyst, which is at 750 degrees centigrade.

In the General Chemical process the nitrogen oxides, which are gases, are then reacted with the soda ash in five absorbing towers, which are three stories high, to produce a weak and impure sodium nitrite solution.

The next step is concentrating and purifying this weak solution of sodium nitrite. The process is first evaporation to remove water. The second step is crystallization to form the crystals of pure sodium nitrite that are in a slurry. The final step is at the centrifuge where the crystals are separated from the slurry, and a dry, pure sodium nitrite crystal with approximately 3 percent moisture is produced. These last three steps are typical of other crystallization processes such as sugar and salt. The pure sodium nitrite crystal that comes off of the centrifuge is our core product.

We will now pass around a sample of the raw, granular product that comes out of the centrifuge. As you can see, this product is very similar to the finished forms that we passed around earlier.

The next part of the process is taking this basic, pure sodium nitrite crystal and putting it into various forms to meet particular requirements of the customers. A possible parallel for the manufacture of a product in different forms is the market for bouillon, which is sold in liquid, powder (with anti-caking agent), cubes and even a paste.

Turning to the next slide, we see that the crystals will be handled differently depending on the form that we want to make. If we are making solution, we will simply take the sodium nitrite crystals that come off the centrifuge and dissolve them in water. (Customers typically request a solution of 38 to 42 percent). Customers for solution tend to be larger customers who like the convenience and price of buying in bulk.

Unfortunately, because of its tendency to cake, bulk dry sodium nitrite is not an option.

When we produce the dry form of the product, the sodium nitrite crystals undergo a small amount of additional drying and conditioning to reduce the moisture from 3 percent to less than 0.2 percent. This product is then blended with a low level of anti-caking agent (around 0.   percent) to produce our standard free flow material or packaged "as is" to produce our high purity granular material.

Finally, the flake product is produced by taking the crystals, compacting them between rollers into a "sheet" and then breaking the sheet of sodium nitrite into flakes. It is a simple process in which only a limited number of customers have an interest.

From an end user's perspective they will order and use a different form of sodium nitrite dependent on price, convenience and practice. If the customer needs to be able to store sodium nitrite for some period of time before use (or resale), it will prefer to have the free flowing product with anticake. If the customer is a large end-user with the ability to accept delivery of rail cars, it may instead prefer the liquid form. However, in each case, the customer can and may change its process if it can obtain sodium nitrite in a different form at a lower price.

In any event, in all cases and without exception a solution customer can substitute the liquid form of sodium nitrite with dry material by simply dissolving the dry material in water. We know this as a fact because we make solution by dissolving the dry material in water. At this point let me demonstrate. [Demonstration]

In short, competition can and does take place between the different forms of sodium nitrite. Liquid form competes directly with various dry forms. Chinese prilled product competes directly with domestic or German "free flowing" grades.

For these reasons, not only is there a single like product, but the form of the product does not create separate sub-markets or market segments. In fact, the same end user may buy liquid and dry sodium nitrite and may switch between the two. Or, one of our traditional customers may switch from "free flowing" to the prilled form of the product imported from China.

With this background concerning the single like product, let me describe the history of the domestic industry, the impact of import competition and the eventual contraction of our industry.

As indicated earlier, was personally involved in the process to acquire Repauno and consolidate the sodium nitrite businesses starting in 2005

In 2005, there were two long-time producers of sodium nitrite in North America, General Chemical with its operation in Syracuse, New York and Repauno LLC with its operation in Gibbstown, New Jersey.

In 2005 both businesses were operating at a loss because of low output and unused capacity. BASF was aggressively growing its market share using low pricing by dumping product into the U.S. market. BASF both increased its sales to major distributors and captured sales to end users. For example, BASF displaced Repauno in supplying one of the major water treatment customers based on price (this came on the heels of a loss of another large solution customer to BASF who supplied dry product).

Consequently, Repauno approached General Chemical in the middle of 2005 to discuss a possible combination of the businesses either through a joint venture or by one party purchasing the business of the other.

It quickly became evident during the discussions that a joint venture was unlikely to succeed for a variety of reasons and that General Chemical was better positioned to take advantage of a consolidation. Simply put, General Chemical had greater capacity to produce the dry forms of sodium nitrite, and it had a lower cost structure.

General Chemical's motivation to acquire the Repauno business was to acquire the customer list and increase the capacity utilization of the

Syracuse facility with the resultant significant improvement in fixed costs on a per ton basis. We thought that if we acquired Repauno's customers and put that volume in our plant in Syracuse, we would be able to fill our capacity and achieve an acceptable level of profitability.

BASF has called attention to the fact that two U.S. customers, PMC and Chemtura, closed in 2006. However, the decision to close the Gibbstown plant was already made before PMC and Chemtura decided to close their own U.S. plants. When we negotiated the acquisition of Gibbstown, the primary objective was to improve our fixed costs by consolidating production into one plant running at 100 percent capacity rather than two plants operating at 50 percent capacity. There were two failing companies, and we realized that the only way to survive was to consolidate and become more efficient in our operations.

Obviously we expected competition from imports during this process, but not at the extraordinarily low prices offered by BASF and the Chinese. Our calculations, late in 2006, would indicate that the customs value being declared by the German and Chinese importers was hardly above the raw material cost of the sodium nitrite. Consequently, am not surprised by the magnitude of the dumping margins issued by the Department of Commerce against both the Germans and the Chinese. In fact, they confirm my original belief that BASF and the Chinese producers were engaged in dumping.

The loss of sales to PMC and Chemtura only hastened the process that had already begun as a result of unfair import competition and declining demand.

After the closure of Gibbstown and the resultant reduction in capacity, the expectation was that the Syracuse plant would operate at full capacity. Unfortunately, while capacity utilization did improve, it was approximately half of what was expected, driven by the continued increase in low priced imports. In fact, the imports increased in 2007 to over 13 million pounds.

In 2007 we expected that we would be able to fill our capacity at the Syracuse plant. In fact, in the first quarter of 2007, immediately after the plant was shut down, our performance temporarily improved. In the first quarter 2007, we did generate a very modest operating profit for the first time in over three years.

Nevertheless, as 2007 went on, imports from Germany and China continued to eat away at our market share. Even though we had closed the Gibbstown plant – which was the larger of our two plants – we could not operate the Syracuse plant at full capacity for the entire year. By the end of 2007, our plant was only about three-quarters full. Despite starting the year with a modicum of optimism, by the end of 2007 we were barely at breakeven results.

Before filing this antidumping case, I undertook an analysis of the market conditions that would allow our overseas competitors to offer the incredibly low prices at which they were selling the sodium nitrite. could not understand the import prices, particularly given the world market prices for ammonia and caustic soda.

As shown in our prehearing brief, it is a relatively simple matter to calculate the raw material costs to produce sodium nitrite. You need about 0.3 tons of ammonia and 0.6 tons of caustic soda to produce one ton of sodium nitrite. If you multiply the published European market prices for ammonia and caustic soda times these factors, you get the raw material cost to produce sodium nitrite. As shown by the next slide, this cost was about 16 cents per pound in 2007.

By comparison, BASF was exporting sodium nitrite from Germany at an FOB origin price of 17 cents per pound. This means that the German producer was selling sodium nitrite at prices that barely covered its own raw material costs, not including energy costs, factory overhead, depreciation or even labor.

The sole remaining U.S. manufacturer of sodium nitrite just cannot compete against import prices at these levels. Even discounting the fact that Repauno and General Chemical were operating at 50 percent of capacity, our own raw material costs for ammonia and soda ash were rising. As shown by the next slide, this trend accelerated to a new high in 2008. Ammonia costs this year are more than twice as high as in 2007.

It is therefore easy to understand how the dumped imports increased so rapidly throughout the market. Because their prices were so low, and because our own costs continued to rise, we could not stop the dumped imports from grabbing more and more market share.

We did try to obtain higher prices because of our position as a local supplier. Because we do not have to ship product across an ocean to get to market, we had some advantage over the imports. But, using extremely low prices, the imports eventually penetrated our largest customer accounts with national distributors.

Looking back, the merger of Repauno and General Chemical did reduce overhead costs, although at the expense of shutting down a U.S. company. However, all of our gains on the overhead cost side are being erased by rising raw materials costs. On top of that, we were never able to operate the remaining plant at full capacity, even though we closed

Gibbstown, because the imports increased by 50 percent by the end of 2007. Imports have suppressed our prices and continue to prevent us from operating at a profitable level.

For these reasons, we need relief from the dumped and subsidized imports urgently. Thank you for your attention.

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