RECORD OF COMMENTS: NATIONAL DEFENSE STOCKPILE MARKET IMPACT COMMITTEE REQUEST FOR PUBLIC COMMENTS ON THE POTENTIAL MARKET IMPACT OF PROPOSED DISPOSALS UNDER THE FY 2007 ANNUAL MATERIALS PLAN

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(**Due November 7, 2005**)

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DEPARTMENT OF COMMERCE

Bureau of Industry and Security

[Docket No. 050923246-5246-01]

National Defense **Stockpile** Market Impact Committee Request for Public Comments on the Potential Market Impact of Proposed **Stockpile** Disposals for FY 2007

AGENCY: U.S. Department of Commerce.

ACTION: Notice of inquiry.

SUMMARY: This notice is to advise the public that the National Defense **Stockpile** Market Impact Committee, co-chaired by the Departments of Commerce and State, is seeking public comments on the potential market impact of the proposed disposal levels for excess materials from the National Defense **Stockpile** for the Fiscal Year (FY) 2007 Annual Materials Plan (AMP).

DATES: Comments must be received by November 7, 2005.

ADDRESSES: Written comments should be sent to either William J. Denk, Co-chair, National Defense **Stockpile** Market Impact Committee, Office of Strategic Industries and Economic Security, Room 3876, Bureau of Industry and Security, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; Fax: (202) 482-5650; E-mail: wdenk@bis.doc.gov; or to Stanley Specht, Co-chair, National Defense **Stockpile** Market Impact Committee, Office of Bilateral Trade Affairs, Bureau of Economic and Business Affairs, U.S. Department of State, Fax: (202) 647-8758; E-mail: spechtsh@state.gov.

FOR FURTHER INFORMATION CONTACT: Eddy Aparicio, Office of Strategic Industries and Economic Security, Bureau of Industry and Security, U.S. Department of Commerce, telephone: (202) 482-8234; E-mail: eaparici@bis.doc.gov.

SUPPLEMENTARY INFORMATION: Under the authority of the Strategic and Critical Materials Stock Piling Act of 1979, as amended (50 U.S.C. 98 et seq.), the Department of Defense (DOD), as National Defense Stockpile Manager, maintains a stockpile of strategic and critical materials to supply the military, industrial, and essential civilian needs of the United States for national defense. Section 3314 of the Fiscal Year (FY) 1993 National Defense Authorization Act (NDAA) (50 U.S.C. 98h-1) formally established a Market Impact Committee (the Committee) to 'advise the National Defense Stockpile Manager on the projected domestic and foreign economic effects of all acquisitions and disposals of materials from the stockpile * * * *'' The Committee must

also balance market impact concerns with the statutory requirement to protect the Government against avoidable loss.

The Committee is comprised of representatives from the Departments of Commerce, State, Agriculture, Defense, Energy, Interior, Treasury, and Homeland Security, and is co-chaired by the Departments of Commerce and State. The FY 1993 NDAA directs the Committee to consult with industry representatives that produce, process, or consume the materials contained in the **stockpile**.

In Attachment 1, the Defense National **Stockpile** Center (DNSC) lists the proposed quantities that are enumerated in the **stockpile** inventory for the FY 2007 Annual Materials Plan (AMP). The Committee is seeking public comments on the potential market impact of the sale of these materials.

The quantities listed in Attachment 1 are not disposal or sale target quantities. They are only a statement of the proposed maximum disposal quantity of each listed material that may be sold in a particular fiscal year by the DNSC. The quantity of each material that will actually be offered for sale will depend on the market for the material at the time of the offering as well as on the quantity of each material approved for disposal by Congress.

The Committee requests that interested parties provide written comments, supporting data and documentation, and any other relevant information on the potential market impact of the sale of these commodities. Although comments in response to this Notice must be received by November 7, 2005 to ensure full consideration by the Committee, interested parties are encouraged to submit comments and supporting information at any time thereafter to keep the Committee informed as to the market impact of the sale of these commodities. Public comments are an important element of the Committee's market impact review process.

Public comments received will be made available at the Department of Commerce for public inspection and copying. Anyone submitting business confidential information should clearly identify the business confidential portion of the submission and also provide a non-confidential submission that can be placed in the public record. The Committee will seek to protect such information to the extent permitted by law.

The records related to this Notice will be made accessible in accordance with the regulations published in Part 4 of Title 15 of the Code of Federal Regulations (15 CFR 4.1, et seq.). Specifically, the Bureau of Industry and Security's Freedom of Information Act (FOIA) reading room is located on its Web page found at http://www.bis.doc.gov/foia/default.htm. Copies of the public comments

received will be maintained on the Web site. If requesters cannot access the Web site, they may call (202) 482-2165 for assistance.

Dated: September 30, 2005.

Matthew S. Borman,

Deputy Assistant Secretary for Export Administration.

Attachment 1

		-	Materials Plan	
	Material		Unit	Quant
[[Page 58373]]				

Bauxite, Metallurgical Jamaican. Bauxite, Metallurgical Surinam. Bauxite, Refractory. Beryl Ore. Beryllium Metal. Beryllium Copper Master Alloy.	LDT. LDT. LCT. ST. ST.	2,0
Chromite, Chemical	SDT	
Chromite, Refractory	SDT	
Chromium, Ferro	ST	1
Cobalt	ST	2 0
Columbium Concentrates	LB Co	2,0
Columbium Metal Ingots	LB Cb	5
Diamond Stone	ct	5
Fluorspar, Acid Grade	SDT	5
Fluorspar, Metallurgical Grade	SDT	
Germanium	Kg	
Graphite	ST	
Iodine	LB	1,0
Jewel Bearings	PC	82,0
Lead	ST	02,0
Manganese, Battery Grade, Natural	SDT	
Manganese, Battery Grade, Synthetic	SDT	
Manganese, Chemical Grade	SDT	
Manganese, Ferro	ST	1
Manganese, Metallurgical Grade	SDT	5
Mica, All	LB	
Platinum	Tr Oz	
PlatinumIridium	Tr Oz	
Quinidine	Av Oz	
Talc	ST	
Tantalum Carbide Powder	LB Ta	
Tantalum Metal Powder	LB Ta	
Tantalum Minerals	LB Ta	5
Tantalum Oxide	LB Ta	
Tin	MT	
Tungsten Ferro	LB W	3
Tungsten Metal Powder	LB W	3
Tungsten Ores & Concentrates	LB W	8,0
VTE, Chestnut	LT	
VTE, Quebracho	LT	
VTE, Wattle	LT	_
Zinc	ST	5

Notes:

(FR Doc. 05-20044 Filed 10-5-05; 8:45 am) BILLING CODE 3510-33-P

^{1.} Actual quantity will be limited to remaining inventory.



November 7, 2005

Eddy Aparicio, Co-Chair Stockpile Market Impact Committee Office of Strategic Industries and Economic Security Bureau of Industry and Security U.S. Department of Commerce - Room 3876 14th Street and Constitution Avenue, N.W. Washington, D.C. 20230

Re: <u>National Defense Stockpile Market Impact Committee - Comments on the Proposed Stockpile Disposals</u>
Ferromanganese in FY 2007

Federal Register Notice October 7, 2005 - Docket ID 050923246-5246-01

To Eddy Aparicio:

Eramet Marietta Inc. is the sole domestic producer of High Carbon Ferromanganese (HCFeMn). The company, located in Marietta, Ohio, submits comments to the Market Impact Committee (MIC) and opposes the Department of Defense's proposed FY 2007 to set HCFeMn disposals at 100,000 tons per year. While the market for HCFeMn did suffer temporary supply shortfalls in global and domestic markets in 2004 and 2005, these were not enough to necessitate the increase in FY 2005 disposal authority, FY 2006 and now FY 2007. Eramet is aware that Congress took action to increase the ceiling established in FY 2001 for FY 2005 disposals of 50,000 tons per year (tpy). The attached graph illustrates the market run up in 2004 and 2005 as well as the precipitous decline in prices since then through the present. The Department of Defense in December 2004 attempted to sell additional quantities above 50,000 but the Department failed to meet a subsequent Congressional request for proof of the need, meeting the requirements established in law.

Senator Robert Byrd (D-WV) inserted language in the FY 2005 Defense Authorization Law requiring sales of ferromanganese beyond 50,000 tons be completed in 25,000 ton offerings and only after: first, certification by the Secretary of Defense that such increased disposals are in the National Interest and the disposal of ferromanganese under such paragraph is due to extraordinary circumstances in markets for ferromanganese; and second, the disposal of ferromanganese ferroalloys under such paragraph will not cause undue harm to domestic manufacturers of ferroalloys. Eramet, the sole domestic producer, contends that DNS sales have and continue to cause undo harm and that supply concerns for ferromanganese and like ferroalloys have long subsided. Eramet requested Congress extend this requirement in the FY 2006 Defense Authorization indefinitely, however the measure is not law as of this writing despite the start of the Fiscal Year.

Our concern is that the present 100,000 tons of HCFeMn in a tender in FY 2006 and proposals to sell a similar amount in 2007 will only collapse prices further. The domestic market for HCFeMn is approximately 300,000 tons per year. The proposed level of sales represents one third of the domestic demand. It is a real concern to have a third of the domestic market controlled by an entity that has no regard for price, profit or loss, only an obligation to move tonnages of material. It is the job of the Market Impact Committee to ensure that DNS sales not precipitate further price declines and upset domestic industries. There was a time when DNS sales were limited to ten percent of the domestic market. DNS sales of High Carbon Ferrochrome (HCFeCr) lead to a collapse of prices and the closure of the sole United States producer leaving United States dependent on offshore sources and remaining stockpile sales for it's HCFeCr needs a critical ingredient of stainless steel.

There are reasons for Eramet Marietta's objections to 100,000 ton per year of HCFeMn sales. The proposed sale of HCFeMn stockpiles would disrupt world and domestic manganese markets. The increased supply of HCFeMn would drive down prices and endanger the business operations of Eramet Marietta. Secondly, in FY 2005 the DNS was unable to meet the Congressional requirements against market disruption to sell an additional 50,000 tons. The

established baseline of 100,000 tons for FY 2006 and for FY 2007 for HCFeMn threatens potential modernization investment projects at Eramet Marietta. Modernization projects include multi-million dollar equipment upgrades of furnaces and other facilities, which are required to keep the company competitively viable.

A viable domestic ferromanganese industry is vital to the United States economic security. Manganese is an essential ingredient in the production of steel. Steel cannot be produced without ferromanganese. The Eramet Marietta Inc. facility is the only operating ferromanganese production plant in the U.S. and Canada. A closure of the Marietta Plant would make the United States steel industry totally dependent on imports to supply this essential and strategic component of steel production. This could be critical during future global shortages and national emergencies. In addition, the United States industrial base would be further weakened and the unique technology and specialized human skills necessary to produce ferromanganese lost forever.

Eramet Manganese leads the world in manganese ferro-alloys production with an annual capacity in excess of 1.1 million tons. The company produces and sells the full range of manganese products to the steel industry: Mn Ore, HCFeMn, MCFeMn, LCFeMn, SiMn, and LCSiMn. In addition to manganese, Eramet produces and sells a variety of manganese compounds: Mn-Al briquettes, Electrolytic Manganese Dioxide, MnO, MnSO4, MnSO4, MnChloride and other chemical compounds. Non-manganese products from company affiliates include Electrolytic Chrome Metal, LC Ferrochrome, Molybdenum, Vanadium and Aluminum Hardeners. Eramet Manganese also engages in the recycling of petroleum catalysts, batteries and copper. Eramet's facilities for producing manganese ferro-alloys are in close proximity to world steel and aluminum markets. Materials are dispatched from eight sites in Europe, America and Asia. These diverse geographical locations ensure prompt distribution worldwide.

In conclusion, Eramet Marietta Inc. remains deeply concerned with the quantities of DNS HCFeMn disposals and how this will serve to undermine current operations and proposed plant investments. We request the DNS not offer sales above 50,000 tons of HCFeMn despite allowances in the FY 2006 AMP at least until Congress acts on the Authorization bill and that 2007 AMP and future annual disposals be limited to 50,000 tons.

Sincerely,

Nicholas A. Pyle, Government Relations Attachment - Graph



November 7, 2005

Eddy Aparicio, Co-Chair Stockpile Market Impact Committee Office of Strategic Industries and Economic Security Bureau of Industry and Security U.S. Department of Commerce - Room 3876 14th Street and Constitution Avenue, N.W. Washington, D.C. 20230

Re: National Defense Stockpile Market Impact Committee - Comments on the Proposed Stockpile Disposals
Ferromanganese in FY 2007

Federal Register Notice October 7, 2005 - Docket ID 050923246-5246-01

To Eddy Aparicio:

Chrome Metal

As the only U.S. producer of Electrolytic Chrome (ElCr) and a vacuum degassed (Vacuum Grade) chrome, Eramet Marietta objects to the proposal in the FY 2007 Annual Materials Plan Revisions seeking to sell up to 1,000 tons per year of chromium metal from the Defense National Stockpile. This represents a 100% increase to FY 2005 authorities. While no actual data may be available for domestic consumption of high purity chrome exists we estimate total US Consumption of Vacuum Grade high purity chrome at between 1,000 and 1,200 metric tons per year. This means DNS would move from slightly less than half of domestic consumption to 83%.

Sales in FY 2005, especially the most recent, resulted in a significant negative downward impact on the US market price. Incidentally, it was Eramet Marietta plant while part of Elkem that supplied a great portion of the current inventory of Vacuum Grade electrolytic chrome metal to the stockpile. The DNS added approximately 788,031 pounds of VG in FY 1991, 2,157,571 pounds in FY 1992, 1,598.826 pounds in FY 1993 and the last acquisition was for 1,841,851 pounds in FY 1994.

The current inventory of Chromium Metal in the Defense National Stockpile was one of the last four items in deficit. VG is a critical and strategic metal that is a major component of gas turbine engines and essential in several aircraft and aerospace applications. The price of aluminothermic chrome metal (ATCr) from the NDS impacts the price and volume of products as in some cases it is interchangeable with VG chrome products produced in Marietta, Ohio. ATCr price fluctuations are somewhat of a "double edged sword" for Eramet as we produce approximately 3000 NT of electrolytic chrome metal and purchase nearly 1200 NT per year of ATCr. The company is both a seller and buyer. The ATCr purchased from the DLA is used as a feedstock for the production of CrAl briquettes.

Chrome metal has a range of grades, depending on the use, which range from 98.5% Chrome content to 99.995% Chrome content. The ability to use each of these grades is very dependent not only on the chrome content but also levels of detrimental trace elements that are present in the material for certain applications. Due to this fact each offering from the DLA must be evaluated based on the possible uses for the grade being sold and in some cases may limit the market and encourages discounting on price. In the most recent offering the analytical data on the metal being sold indicated it was not suitable for welding applications. This quality factor reduced available market and had a significant impact on the market price. Another issue to consider is the use of the chrome in the production of nickel based super alloys for aircraft gas turbine engines. These are very special aerospace applications, which require an extensive and expensive qualification process, which typically includes the engine manufacturer. This is not economically feasible for a short-term supplier from several production sources such as the DNS.

The National Materials Advisory Board, Commission on Engineering and Technical Systems and the National Research Council, a branch of the National Science Foundation issued a report in 1995 which concluded that the U.S. should maintain its reserves of Chromium Metal. The general conclusions and recommendation of NRC report (NMAB-480) is summarized as follows "the Committee recommends that the National Defense Stockpile maintain and continually upgrade to industry standards a sufficient quantity of high purity chromium metal to meet the industry's needs in the event of an emergency." The report cites the lack of domestic alternatives, supplier reliability and several scenarios for the disruption of supplies. A copy of the study was included in past submissions to the Market Impact Committee.

Current inventories of chromium metal in the Defense National Stockpile could accommodate the U.S. aerospace and aircraft industries for less than two years. The committee report suggests this material is available in sufficient quantities to allow for start-up of new production facilities in the event of an emergency. We take exception to the quality assumptions and applicability of the lower grade chrome metal containing sulfur greater than 50 parts per million and nitrogen greater than 60 parts per million in the proposed sale material.

World demand for high purity chromium languishes at approximately 20,000 metric tons per year. The majority of this demand is met with ATCr production of 17,000 tons from various foreign sources. Eramet Marietta produces about 3,000 tons of high purity chromium metal a year, of this less than 1,200 is degassed vacuum grade. We are very concerned that our limited U.S. market share would be severely impacted by proposed sales of up to 1,000 tons, or a third of the sole U.S. producer annual output of VG or the equivalent of 83% of its production of high purity Chrome.

Eramet recommends the Market Impact Committee not recommend the increase to the Department of Defense and furthermore that any sales of high purity chromium metals we suggest that sales of Vacuum Grade material be limited to 100 tons per year, about 10% of domestic consumption. We would prefer that no chromium be sold, or that aluminothermic (ATCr) materials be sold first. Quantities for total annual sales should be limited to not more than 300 tons and that it be restricted to not more than 1/3 VG (100 tons) and 2/3rds (200 tons) be ATCr. We would also recommend that the DNS sell poorer quality material with high sulfur and nitrogen first. Finally, we would request an option for the right of first refusal for the purchase of any sales in order to prevent market disruption.

Our comments in conclusion on chromium illustrate the limited scope of the proposal to sell this material given the findings of the National Research Council, the harm to the domestic industry and our concerns about the DLA's ability to sell poor quality materials into depressed markets. We have stated terms with which the sole U.S. producer could survive with the direct competition from sales by the Federal Government. We ask the Market Impact Committee to reject the request to the FY 2007 Annual Materials Plan and suspend FY 2006 disposal authority to increase sales of chromium metal. Eramet welcomes an opportunity to meet with the Market Impact Committee to discuss chromium metal disposal from the Defense National Stockpile.

Sincerely,

Nicholas A. Pyle, Government Relations Eramet Marietta, Inc. Contact Address: 1223 Potomac Street, NW Washington, DC 20007 202-333-8190 Facsimile – 202-337-3809 npyle@attglobal.net



Kennametal Inc.

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November 9, 2005

Mr. William J. Denk
Co-chair, National Defense Stockpile
Market Impact Committee
Office of Strategic Industries
& Economic Security, Room 3876
Bureau of Industry & Security
U.S. Department of Commerce
Washington, DC 20230

Re: Docket No. 050923246-5246-01 - Comments on the Potential Market Impact of Stockpile Disposal Levels for FY 2007

Dear Mr. Denk:

I am writing on behalf of Kennametal Inc., to argue energetically for an increased sales authorization level in the FY 2007 Annual Materials Plan for tungsten ore concentrates from eight million to twenty million pounds contained tungsten. We believe this increase will have a positive impact on manufacturing in the United States by saving thousands of jobs and enhancing the viability of hundreds of small and mid-sized companies.

We renew our request that the Market Impact Committee recommend not 8 million pounds for FY 2007, but 20 million pounds. We believe this size release will have a positive impact on manufacturing in the United States by saving thousands of jobs and enhancing the viability of hundreds of small and mid-sized companies. At the same time, it will have no negative impact on US defense capability, as these materials have already been declared non-strategic.

Misleading assertions made during the FY 2006 comment period that prices will "crash" with the larger release from the stockpile, thus making future investments in new mines untenable, have already proven untrue. With the recent information that the MIC recommended only 8 million pounds to be released in FY 2006, the price of tungsten began again to climb. And evidence from the mine operators themselves refutes the red herring argument that new mine investment will be impaired. In its own analysis of the economics of tungsten mining done for its June, 2001 prospectus for investors, North American Tungsten found that restarting the CanTung mine would be highly profitable (32.8% internal rate of return) when concentrates sell at the then prevailing rate of around \$71 per mtu for concentrates. Today the price is hovering around \$250- per mtu for concentrates.

Since January 2005 tungsten prices have spiked to unprecedented highs—from around \$90 per unit in January of 2005 to a current high of around \$250 per unit. The price increases have hurt all users of tungsten and have already negatively impacted the thousands of small manufacturers and processors with limited control over their product prices and few options for accessing raw materials. The impact is also beginning to be felt in the wider manufacturing sector, as these exorbitant raw materials prices

must be passed along as price increases. Very soon, the end consumer will be affected, negatively impacting the US economy.

Economists and reputable business organizations such as the **National Association of Manufacturers** are projecting strong demand for industrial raw materials with the continued economic expansion in the United States and high growth rates in developing industrial economies, notably China. Analysis by the **Manufacturers Alliance** concludes that this strong demand coupled with the depletion of worldwide strategic reserves of tungsten make it unlikely that prices will fall below the level cited by the producers as needed for a positive rate of return. Moreover, if prices begin to drop precipitously, the DLA is under no obligation to maintain the higher level of sales established for the stockpile.

Finally, the Manufacturing Council, which exists under the auspices of the Department of Commerce and functions as an advisory body to the Secretary of Commerce, has recommended in public record the release of 20 million pounds for FY 2006. The economics remain the same.

Another issue that could be raised to create confusion is the strategic status of the DLA's tungsten stockpile in regards to our national defense. This issue hits at the heart of every American's fervent desire to insure our national security. However, this is again a misleading argument without basis. The tungsten stockpile was established to provide tungsten reserves to support a conventional war such as World War Two. With the end of the cold war it was determined that future wars would be very different and the tungsten stockpile was no longer needed. The reserve, in its entirety, has been approved for sale with only the timing being the issue. This stockpile is not strategic to our national defense.

It is legally permissible and fiscally sound for the Market Impact Committee to recommend the increased release. It is also the right thing to do, as it will bring the benefits of an American resource—the tungsten stockpile—to bear on thousands of at-risk American jobs, hundreds of small-to-midsize American businesses in the tungsten and related industries and to our economy. The price of tungsten will not crash, new and currently planned mine openings will still take place, the US Government will reap the economic value of the higher market prices, and many manufacturing jobs and even companies will be saved.

A substantial increase in sales of tungsten from the National Defense Stockpile provides an opportunity for the government to profit from the historically high prices of tungsten while also helping manufacturers benefit from increased tungsten supplies in an abnormally tight market. Further, the substantial increase is very likely to have a stabilizing effect on the world market prices by providing extra supplies and discouraging speculators.

I also respectfully suggest that the comment period for this vital topic be extended for an additional thirty days, as many entities who desire to comment were unaware of the posting of the call for comment—particularly because the FY2006 call for comment was so recently concluded.

It is not Kennametal's intent to achieve an unfair competitive advantage with our request, but rather to support a return of stability and balance to the world tungsten market, thereby protecting American manufacturing businesses and jobs. Thank you for your attention to our position on this important topic.

Sincerely,

Joy Chandler

Director of Corporate Relations

CAMARA ARGENTINO - PARAGUAYA DE PRODUCTORES DE EXTRACTO DE QUEBRACHO

Passeo Colon 221 - P. Baja C1063ACC Buenos Aires Republica Argentina Tel.: 4331-5540/47 Fax: 4331-5548/5549

November 15, 2005

William J. Denk, Co-Chair
National Defense Stockpile Market Impact Committee
Office of Strategic Industries and Economic Security
Room 3876
Bureau of Industry and Security
U.S. Department of Commerce
14th Street and Constitution Avenue, N.W.
Washington, DC 20230

Stanley Specht, Co-Chair
National Defense Stockpile Market Impact Committee
Office of Bilateral Trade Affairs
Bureau of Economic and Business Affairs
Room 3828
U.S. Department of State
Harry S. Truman Building
2201 C Street, NW
Washington, DC 20520

Re: Proposed AMP Quantities for Quebracho Tannin

Gentlemen:

This is the response of the Chamber of Argentine-Paraguayan Producers of Quebracho Extract ("the Chamber") to the recent Annual Materials Plan ("AMP") proposal that would allow the Defense National Stockpile Center ("DNSC) to sell as much as 6,000 tons of quebracho tannin on international markets in FY 2007. As explained further below, the proposed AMP quantity is approximately 15% of the Chamber's annual international sales, and is likely to be sold at about 14% of the current market price. This would cause a minimum reduction of 57% in the prices that Chamber members receive for their products and likely would force at least one Argentine factory to close. These consequences would be suffered in the poorest provinces of Argentina, in the context of the continuing economic crisis and despite the fact that the Stockpile quebracho originally was provided by a friendly nation, at significant cost, to assist the United States in time of war. The Chamber firmly believes that the proposed AMP quantity is a clear and continuing violation of DNSC's legal obligation "to the maximum extent feasible . . . to avoid undue disruption of the usual markets of producers, processors and consumers . . ." 50 U.S.C. §98e(b)(2).

The Chamber and its members historically have gone to great lengths to advise DNSC of the economic disruption that would be caused if significant quantities of Stockpile quebracho are dumped on international markets. The Chamber has communicated its concerns to DNSC at every critical point, has sent representatives to numerous meetings in the U.S., has repeatedly supplied relevant economic data and provided detailed legal and economic analyses. The Chamber has gone so far as to purchase and store, at substantial and continuing expense, 20,000 tons of material for which it has no use, simply to ensure that DNSC did not dump it on international markets. In response, DNSC has continuously and aggressively promoted sales that would cause substantial disruption of international quebracho markets, and consistently has refused to conduct a reasonable and unbiased analysis of the effects of Stockpile dumping on international quebracho markets. DNSC has pursued this course despite the conclusions of its own consultants that burial of the remaining Stockpile quebracho is the most effective solution to this problem and would provide the greatest benefit to the American public while avoiding harm to quebracho markets.

On March 7, 2005, the Chamber received from DNSC a quebracho Determination Letter and Market Analysis. The Determination Letter and Market Analysis purport to support AMP quantities of 6,000 tons for quebracho in FY05 and FY06. The Determination Letter states that the Market Impact Committee (MIC) has concurred in the DNSC determination. However, the Chamber was allowed no opportunity to provide DNSC or the MIC with our views on the DNSC report. Despite repeated Chamber requests, DNSC refused to allow the Chamber any role in reviewing and commenting on the quebracho Market Analysis. It was presented to the Chamber as a *fait accompli*. This not only prevented the Chamber from any meaningful opportunity for input to DNSC, but also prevented meaningful input to the MIC and thereby hampered the ability of the MIC to provide balanced and accurate advice with respect to potential market impacts.

The Chamber has interacted extensively with the MIC in the past, and the MIC consistently has cautioned DNSC to use great care when selling quebracho on international markets. In this case, such interaction was not possible because the Chamber did not receive the DNSC Market Analysis until after the MIC had completed its review of the AMP quantities for FY05 and FY06. The DNSC market determination states that the MIC reviewed the Market Analysis and its comments were incorporated. However, DNSC deprived the MIC of the views of the Chamber, and deprived the Chamber of its opportunity to comment to the MIC, by ensuring that the Chamber would not receive the DNSC analysis until the MIC had already completed its review.

Detailed review of DNSC's Report reveals that instead of providing an open and impartial analysis of quebracho market impacts, DNSC has prepared a report that is biased toward their interests at every turn and in no way reflects a reasonably balanced view of the effects of Stockpile sales on international quebracho markets. First, DNSC has adopted an economic test under which market disruption is not deemed to be "undue" unless the Chamber is brought to the brink of economic ruin, and which admittedly allows DNSC to interfere with quebracho markets in violation of the Stockpiling Act. In fact, DNSC's quebracho Report turns the statute on its head. Far from avoiding undue market disruption "to the maximum extent

feasible," DNSC has taken all possible steps to increase DNSC sales. In defining "undue market disruption," the DNSC Report states:

Market disruption can [sic] defined as any interruption of the normal course or unity of the market. Since any sale by DNSC could be considered a "disruption," the crucial element is the degree of the disruption as defined by the word "undue."

Based on the examination of several dictionaries, the meaning of the word "undue" can be summarized in three words: unjust, inappropriate, or unreasonable. Each of these words addresses a slightly different aspect of what might be construed as "undue."

In every market it enters, DNSC adds to the available supply. The consequences of an increase in supply will always benefit consumers by increasing competitive pressures on suppliers. Depending on the market pricing mechanism, the prices received by suppliers may also decline. Even without price declines, DNSC sales are likely to reduce supplier's revenues because of consumers substitution of new production with DNSC material. It is therefore reasonable to conclude that DNSC sales are expected to benefit consumers and increase the competitive pressures on suppliers. Therefore, these conditions must be considered reasonable.

Preventing suppliers from earning a profit or forcing dramatic job losses might be construed as unjust. The projections show that DNSC sales will not have these impacts on the industry. The industry should continue to operate profitably. No plants will be forced to close by DNSC sales.

DNSC sales can be viewed as an appropriate remedy to the current inefficiency of the quebracho market. DNSC's participation in the quebracho market would improve the competitiveness of the quebracho market by offsetting the monopolistic power that currently exists . . . Therefore, one could argue that consumers would continue to benefit from DNSC's participation until its market share reached 20% (pp. 74-75).

DNSC's analysis commits the fatal error of looking to the dictionary, rather than to the intent of Congress, to define "undue market disruption." This leads to two fundamental flaws in the analysis: (1) market disruption is defined as "undue" only if the industry could not continue to operate profitably and would be forced to close one or more plants as a result of DNSC sales; and (2) DNSC is established as the international market police, curbing alleged monopolies and remedying presumed market inefficiencies by benefiting consumers at the expense of the

Chamber. Both of these underlying premises are clearly inconsistent with the market impact provisions of the Stockpiling Act.

As with the test for undue disruption, other major aspects of the quebracho analysis are skewed to favor DNSC. We are attaching a detailed review of the DNSC analysis prepared by Everest Consulting Associates (ECA). We would have provided such an analysis in the prior MIC review of the DNSC report, had we been given an opportunity. The ECA review of DNSC analysis draws the following major conclusions:

Market impacts. DNSC proposes to sell 6,000 *metric tons* (MT) – approximately 15% of the international market for quebracho extract ("QE") used for tanning applications. Recent sales have been concluded at an average price of \$115/MT, about 14% of the average market price of approximately \$810. The economic consequences of such sales on Argentine producers would be adverse and substantial. The QE sold by DNSC would enter world markets and displace new QE. The output of new QE would fall by a corresponding amount and the average cost of production of new QE would increase as the fixed cost of production would be spread over a lower output. Based upon estimates of fixed and variable costs provided by Argentine producers, the effect of a 6,000 MT DNSC sale would – at a minimum – result in a 57% reduction of annual profit, assuming that the average world price of QE was not affected. Actual economic impacts on QE producers would probably be more severe. This is because the extra supply resulting from the DNSC sale would probably cause QE prices to fall. The estimated impact is very sensitive to price assumptions. For example, if the DNSC sale were to result in a 7% drop in average price, the annual profits of QE producers would fall to zero; lower prices would result in outright losses.

Monopoly power. DNSC agrees that the market would be disrupted, but argues that this disruption would be beneficial on balance, because it would lower the monopoly power of the Argentine producers. The assertion that this market is a monopoly is incorrect because there are viable substitutes (both natural and synthetic) for QE. Any attempt by QE producers to raise prices above current levels would (in other than the very short term) cause customers to switch to these substitutes. The choice and the alternatives are not binary as DNSC implies. Many tanners can partially replace the products of Chamber members with a lower quality material without significantly altering the overall performance of their leather. If DNSC provides a new source of extract at a low cost it will generate this replacement. This will reduce the tonnage sold by Chamber members and will press prices down during the bargaining process. DNSC asserts that customers would benefit from the sale because of the availability of an additional source of supply—and thus concedes that the DNSC material would displace new QE. Moreover, customers would only benefit if the market price of QE were to fall. DNSC finds that the Chamber members engage in price discrimination. However, the Chamber producers have only limited control over actual prices paid. In the intermediate or long term they are more nearly "price takers" than "price makers." Prices essentially are determined by market conditions such as the demand for shoes, consumer tastes regarding the composition of shoes, the prices and availability of quebracho substitutes and local variations in market conditions such as product specifications, freight costs, duties/taxes and differences in local distribution systems.

Errors and inconsistencies. The DNSC analysis includes significant inconsistencies and factual errors, and DNSC does not appear to have relied on any of the data that the Chamber provided at DNSC's request. Major errors involve the methods used to calculate the US imports, exports and consumption of QE, and general errors regarding the tanning industry. For example, the DNSC builds an argument with data that mixes tanning and non-tanning extracts, and mixes QE with other types of extracts. DNSC is comparing apples to oranges and ultimately presents economic figures that appear inflated. Additionally, the DNSC report presents data that conflict with the data provided by the Chamber and suggest a questionable knowledge of the leather tanning market. For example, the DNSC report asserts that vegetable tannins account for 30%-40% of the cost of shoe sole leather, whereas the Chamber provided information to DNSC indicating that the cost of the tannin is roughly 10% of the total cost of shoe sole leather.

Formosa plant closure. DNSC correctly finds that the Chamber producers (taken as a whole) would be better off if the smaller Formosa plant operated by Chamber member Unitan were closed. Such an administered solution is certainly counter to free market traditions, and DNSC has no brief to formulate industrial policy for sovereign governments. As discussed above, the Stockpiling Act directs DNSC to avoid such market interference. Unitan has multiple objectives in keeping the Formosa plant open, including: (1) protecting 2000 or more jobs in the poorest province in Argentina; (2) avoiding closure costs; and (3) maintaining capacity in the event that new markets are found over time, which would increase capacity utilization and provide additional profit opportunities. The fact that the Formosa plant remains in operation is inconsistent with the DNSC allegation that the Chamber is a monopoly. If the Chamber were a monopoly, it clearly would agree to close a factory and enjoy higher profits. The Chamber is not a monopoly, and while the members compete as hard as they can, they feel a social responsibility to fight before closing any plant. When DNSC sales displace Chamber revenues, the time the Chamber has to reverse its current financial difficulties is reduced.

Historic Stockpile Sales. DNSC alleges that historic Stockpile sales have not harmed the market, claiming that there is only a weak negative association between Stockpile sales and price. However, this conclusion is based on compounded errors and is clearly incorrect. The average annual sales volume (2,200 MT) is significantly smaller than the DNSC sale volume considered in this analysis (6,000 MT). Moreover, as stated in the prior ECA reports that have been provided to the MIC, sales of quebracho have decreased in recent years, so the proportional impacts of these sales amounts on the total market was smaller in the past. The large sales of quebracho to the Chamber would not be expected to have a depressing effect on quebracho markets since none of it has been resold. DNSC also fails to clarify that most of the previous releases have been awarded to companies that have used it or sold it within the USA and only a small portion of those releases probably left the USA. The DNSC analysis does not attempt to examine the relationship between quebracho plant closures (three in the past ten years) and sales. Now the story is quite different; as much as 6,000 tons (four times the historic volume) could be released to international markets. Recent DNSC sales have specifically targeted the Italian market, the quebracho industry's key market, which has suffered a severe decline during the last four years. Recent DNSC awards to the Italian firm Lyons and Volpi constitute approximately 30% of the Chamber's annual Italian market.

In short, DNSC 's analysis of quebracho markets is biased substantially in favor of DNSC sales. We urge the MIC to give detailed examination to the DNSC Report, and to the ECA analysis of the report. We believe you will agree that the DNSC Report in no way reflects a reasonably balanced view of the effects of Stockpile sales on international quebracho markets, and does not provide any reasonable basis for the proposed AMP quantity of 6,000 tons per year.

Respectfully submitted,

/s/

Horatio M. Barrilatti Bengloea *President*

Effects of a DNSC Sale of 6,000 MT of Quebracho Extract on the Quebracho Market

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Summary

This report supplements earlier reports (ECA 2002, 2004) analyzing the effects of *Defense National Stockpile Center* (DNSC) sales of *quebracho extract* (QE) on the producers of new QE, located in Argentina. DNSC proposes to sell 6,000 *metric tons* (MT)—approximately 15% of the international market for QE used for tanning applications—at an average price of \$115/MT. The present average market price of QE (for tanning applications) is approximately \$810. This analysis shows that:

- ◆ The economic consequences of this sale on Argentine producers would be adverse and substantial. The QE sold by DNSC would (after re-processing) enter world markets and displace new QE. The output of new QE would fall by a corresponding amount and the average cost of production of new QE would increase as the fixed cost of production would be spread over a lower output. Based upon estimates of fixed and variable costs provided by Argentine producers, the effect of a 6,000 MT DNSC sale would—at a minimum—result in a 57% reduction of annual profit, assuming that the average world price of QE was not affected.
- ◆ Actual economic impacts on QE producers would probably be more severe. This is because the extra supply resulting from the DNSC sale would probably cause QE prices to fall. The estimated impact is very sensitive to price assumptions. For example, if the DNSC sale were to result in a 7% drop in average price, the annual profits of QE producers would fall to zero; lower prices would result in outright losses.
- ♦ DNSC operates under a legislative mandate to make efforts "[t]o the maximum extent feasible...to avoid undue disruption of the usual markets of producers, processors, and consumers of such materials."
- ♦ DNSC agrees that the market would be disrupted, but argues that this disruption would be beneficial on balance, because it would lower the monopoly power of the Argentine producers. The assertion that this market is a monopoly is incorrect because there are viable substitutes (both natural and synthetic) for QE. Any attempt by QE producers to raise prices above current levels would (in other than the very short term) cause customers to switch to these substitutes. However, even if QE producers had a monopoly position, DNSC would still be obliged to avoid disruptions.

- ◆ DNSC asserts that customers would benefit from the sale because of the availability of an additional source of supply—and thus concedes that the DNSC material would displace new QE. Moreover, customers would only benefit if the market price of QE were to fall.
- ♦ The plants that produce new QE are located in remote and economically disadvantaged provinces of Argentina. The quebracho industry is fragile with historically declining markets and a record of plant closures now providing employment to 8,000 workers in an area with high unemployment. It will be up to the courts to decide whether the estimated market impact is undue, but placing this industry in further peril doesn't seem like justice.
- ♦ The QE producers believe strongly in the merits of their case. They have expended considerable time and effort to negotiate with DNSC, retained counsel, and commissioned this and earlier economic studies. Moreover they have purchased 20,000 tons of QE from DNSC in fiscal years 2002 and 2003. This material has not been reprocessed; it was purchased precisely because the quebracho producers believed that it would destabilize the market.

Introduction

The *Defense National Stockpile Center* (DNSC) has proposed to sell 6,000 *metric tons* (MT) of *quebracho extract* (QE) that has been declared excess.¹ The average price for this surplus material—for which bids have been received—is \$115/MT. DNSC operates under a legislative mandate (the Stock Piling Act,) when disposing stockpiled materials, to make efforts "[t]o the maximum extent feasible...to avoid undue disruption of the usual markets of producers, processors, and consumers of such materials."

QE is now² produced by two firms (Unitán and Indunor) operating three factories in Argentina that are members of the Cámera Argentino-Paraguaya de Productores de Extracto de Quebracho (hereinafter "Chamber"). The Chamber believes that this proposed sale would significantly and adversely impact the QE market and have retained O'Connor & Hannon, LLP to represent them. In turn, O'Connor & Hannon have retained *Everest Consulting Associates* (ECA) to estimate the possible impacts of this sale. ECA has prepared two economic analyses (ECA 2002, 2004) that estimate the

¹ This includes a sale of 3,300 MT to Lyons & Volpi Leather (at approximately \$121/MT) and another proposed sale of 2,700 MT to Westan (at approximately \$109/MT).

² In the past many more firms and plants produced QE. Declining demand has led to the closure of several plants (see ECA 2004).

possible effects of DNSC sales of QE. DNSC contests the claim that undue market disruption will result and has prepared two reports (Rasmussen 2004, 2005) that challenge the ECA findings. This document reexamines the ECA analysis (based on estimates for 2004) and comments on the assertions of DNSC.

The Case in Brief

Although there are complexities (addressed in later sections), the essence of the case is straightforward. The key points include:

- ◆ QE is a chemical used principally in the tanning of leather. QE is produced in three plants in the provinces of Chaco and Formosa, Argentina—two relatively large (28,500 MT/yr) and one small (13,500 MT/yr). World sales of QE for 2004 were estimated to total 55,273 MT of which 49,624 MT were sold (at an estimated price \$810/MT) for tanning applications and 5,649 MT for other applications (at an estimated price of \$510/MT).³ Some QE is sold in Argentina, but the international market for tanning applications (41,180 MT) accounts for the majority.⁴
- ◆ Fixed costs account for a high proportion of total costs in the manufacturing of QE. As a result, profits and economic viability of plants depends critically on capacity utilization. Chamber personnel claim that the average breakeven point of their plants is approximately 60% of rated capacity (figured at an average price of \$800/MT). In 2003 the three Chamber plants operated at 74% (Puerto Tirol), 83% (Formosa), and 79% (La Escondida) of capacity—a weighted average of 78.4%. In the past, several other plants have closed when capacity utilization rates have fallen beneath 65% to 70%.
- ♦ The average variable cost is reported by Chamber personnel to be \$275/MT. This variable cost coupled with the estimated breakeven level enable estimation of the fixed costs and thus the costs, revenues, and profits at any assumed operating level.
- ♦ Any QE sales by third parties (e.g., DNSC or traders who purchase from DNSC) would directly reduce the volume sold by the Chamber by a corresponding amount and probably would impact market prices as well. QE sales lost to DNSC will lower aggregate capacity utilization and, depending upon associated market price impacts

³ Price differences for these markets reflect quality specification differences and market conditions.

⁴ Quantitative estimates of plant capacities, breakeven capacities, market size, and variable costs are provided in an affidavit of Horacio Barilatti Bengolia, President of the Chamber and a Director of Indonur (hereinafter Chamber affidavit).

could result in the closure of one of these plants. The proposed DNSC sale of 6,000 MT accounts for a substantial percentage of the present QE market (15% of the export market for tanning applications).

♦ The QE plants, located in the Argentine provinces of Chaco (Unitán's Puerto Tirol and Indunor's La Escondida plant) and Formosa (Unitán's Formosa plant), directly employ 880 workers. Direct and indirect employment is estimated to total approximately 8,000 persons. These plants are located in remote and poor areas, heavily dependent upon spending for survival and characterized by low income per capita, high illiteracy rates, high unemployment rates (even relative to Argentina), and a high proportion of the population with unsatisfied basic needs (ECA, 2004). Any plant closure would be particularly painful.

Based upon the above inputs it is possible to estimate the effects of the proposed DNSC sale. This is done in Table 1 for several assumptions regarding the possible price impacts of the sale. Even if there was no price effect and the DNSC material merely displaced that produced by Chamber members, the effects would be substantial (the row in the table corresponding to a price of \$810/MT). The annual profits would be reduced by 57% from approximately \$6 MM annually to \$2.5 MM. The quantity sold by the Chamber producers would be reduced by 6,000 MT and, therefore, the capacity utilization of some or all plants will be decreased—on an overall basis the capacity utilization would be decreased from 78.4% in the base case to approximately 70%. It is up to the courts to assess whether or not such an impact constitutes "undue disruption," but most businesses would regard a 57% profit reduction as significant.

The above calculation is straightforward and the results entirely consistent with common sense: displacing 12.2% of output (15% of the international market) will have significant effects on the profits of an industry with substantial fixed costs. In short, this calculation has face validity.

Moreover, the actual effects of the DNSC sale are likely to be greater than calculated above because this simple calculation assumes that the average market price of QE would not be affected by the DNSC sale. Again, common sense suggests that the appearance of additional (potentially low cost) supply is likely to have *some* adverse

price impact. The trader who purchases and reprocesses the DNSC material will clearly have an incentive to offer a price beneath the prevailing market. And, offers of a lower price will put pressure on Chamber producers to match or at least reduce their prices in order to maintain capacity utilization.

Table 1 shows the resulting impacts on the Chamber producers as a function of the assumed price impact. It is noteworthy that a reduction of the QE price (for tanning applications) from \$810 to \$754—just 7%—would drive the industry profit to zero; greater price reductions would have proportionately greater impacts—the industry breakeven capacity utilization would increase and progressively greater losses would result. Figure 1 shows how various price decreases affect Chamber profits. Thus, even a small price reduction would greatly increase the impacts of a DNSC sale.

Chamber members believe strongly in the merits of their case. They have expended considerable time and effort to negotiate with DNSC, retained counsel, and commissioned this and earlier economic analyses. Moreover (see below), they have purchased a total of 20,000 tons of quebracho from DNSC in fiscal years 2002 and 2003. This material has not been reprocessed, but remains in warehouses; it was purchased precisely because the Chamber believed that it would destabilize the market.

Thus, the actions of the Chamber members clearly indicate that they believe strongly in the merits of their position. And they are the ones with the greatest knowledge of the quebracho market.

Table 1. Effect of a 6,000 MT DNSC sale of Quebracho Extract given various assumptions regarding price effects and no quantity effect

Base case without DNSC sale:	Industry volume (000 MT)	49.624	For tannery applications
	Industry volume (000 MT)	5.649	For non-tannery applications
	Industry volume (000 MT)	55.273	Total
	Industry capacity (000 MT)	70.5	Total three plants
	Capacity utilization	78.40	
	Breakeven capacity util (%)	60.00	At \$800/MT
	Breakeven capacity util (%)	63.37	At prevailing prices
	Price (\$/MT)	\$810	For tannery applications
	Total profit (\$ MM)	\$5.67	See Table A-1

Assumed price effect (%)	Resulting Price (\$/MT)	Resulting output (a) (000 MT)	Resulting Output (a) (% capacity)	Resulting profit (\$ MM)	Profit in Comparison to base case (\$ MM)	New Breakeven point (% capacity)	Remarks
0.00	\$810	49.273	69.89	\$2.46	(\$3.21)	63.37	Profit down by 57% breakeven unchanged
-4.32	\$775	49.273	69.89	\$0.93	(\$4.74)	67.25	Profit down by 84% breakeven increased
-6.91	\$754	49.273	69.89	\$0.00	(\$5.67)	69.89	Profit down by 100% breakeven increased
-7.41	\$750	49.273	69.89	(\$0.16)	(\$5.83)	70.36	Loss results, breakeven increased
-10.49	\$725	49.273	69.89	(\$1.25)	(\$6.92)	73.83	Loss results, breakeven increased
-13.58	\$700	49.273	69.89	(\$2.34)	(\$8.01)	77.70	Loss results, breakeven increased
-16.67	\$675	49.273	69.89	(\$3.43)	(\$9.10)	82.06	Loss results, breakeven increased

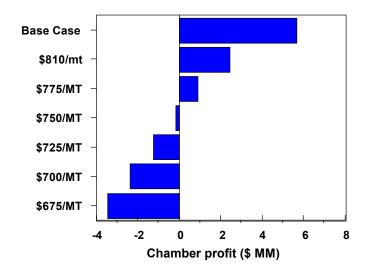


Fig. 1. The effect of Quebracho market price impacts of a DNSC sale on Chamber profits. Profit impacts are material even if there is no price impact.

DNSC Reaction

DNSC has challenged (Rasmussen 2004, 2005) the assertions of the Chamber and the conclusions of the ECA analyses. We believe that many of the issues raised in the DNSC analysis are only of limited relevance and, on balance, serve to obfuscate what is a relatively straightforward matter. Many of the DNSC allegations are inconsistent. Nonetheless, we will respond to certain of the points raised by DNSC as these appear to be quite contentious.

One issue addressed at length by DNSC is the degree of competition in the quebracho market. At several points in the DNSC (Rasmussen, 2005) analysis it is argued that quebracho producers have a virtual monopoly. At other points, it is conceded that there are viable substitutes for quebracho—which is inconsistent with the monopoly assertion. Yet it is by no means clear that the market structure, *per se*, is relevant. To be sure, competition may alter the price effects associated with a DNSC sale. But, shown in Table 1, the effects of a sale are substantial even if there were no price effect and the DNSC quebracho merely displaced sales that would have been made by the quebracho producers. *And moreover, the language of the statute requiring DNSC to manage the stockpile to "avoid undue disruption of the usual markets" does not contain any exception for monopolies. Thus, even if DNSC were correct in asserting that the quebracho industry is a monopoly—and it is not—this fact would not relieve DNSC of an obligation to avoid undue disruption. Having said this, it is appropriate to refute the characterization of the quebracho industry as a monopoly.*

The Herfindahl-Hirschman Index (HHI)

Rasmussen (2005) uses the *Herfindahl-Hirshman Index* (HHI)⁵ to describe the concentration of the quebracho market. The HHI is mathematically defined as the sum of the squared market shares of each company in the defined market.⁶ Thus, for example, if the market consisted of four firms, each with a 25% market share, the HHI index would

⁵ This index was developed more or less contemporaneously by Orris Herfindahl in 1951-1952 and Albert Hirschman a few years earlier (see e.g., Hirshman, 1964; Weinstock 1982, 1984; Miller, 1982; Kwoka, 1985; Kelly, 1981; Rhoades, 1993; Nauenberg *et al.*, 1997, 2004; Micheline and Pickford, 1985)

⁶ Mathematically, if S_i is the market share of the i^{th} firm, the HHI = $\Sigma (S_i)^2$ for all i.

equal $(25)^2 + (25)^2 + (25)^2 + (25)^2 = 2,500$. Alternatively, if the market consisted of only one firm with a 100% market share, the HHI would be $100^2 = 10,000$. Markets for which the HHI is between 1,000 and 1,800 are considered by the Department of Justice and Federal Trade Commission to be moderately concentrated, and those in which the HHI is in excess of 1,800 points are considered to be concentrated. The U.S. Department of Justice now uses the HHI to characterize the economic structure of industries and for "flagging" possible antitrust concerns⁷ in connection with possible mergers. (Among other things, transactions that increase the HHI by more than 100 points in concentrated markets presumptively raise antitrust concerns under the Horizontal Merger Guidelines issued by the U. S. Department of Justice and the Federal Trade Commission.⁸)

Rasmussen (2005) calculates (p 28) the HHI for the quebracho industry as 5,100 "more than 2 ½ times the level where the Department of Justice considers competition to be quite restricted." He also argues (p 46) that, because the market is so clearly a duopoly (from the dictionary definition of having exactly two producers), then the claim made in the Everest (2004) report that the market is somewhere between an oligopoly and perfect competition is imprecise, if not disingenuous.⁹

Rasmussen's analysis of the market (in one portion of the report) is by no means so cut and dried, however. First, there are economists who would argue that the HHI is not a precise predictor of market behavior¹⁰ or competition.¹¹ Perhaps more important, a

⁷ http://www.usdoj.gov/atr/public/testimony/hhi.htm

⁸ Merger guidelines that explicitly use the HHI date back to 1982 (see Weinstock, 1982; Miller, 1982).

⁹ Interestingly, the quoted statement in Rasmussen (2005) regarding duopolies notes that "depending upon the assumptions made about the market…price competition may exist at a point between that of a monopolist and that of perfect competition."

Partners, L.P. and Shell Oil Company, United States of America Before the Federal Trade Commission, FTC File No. 041-0164. These comments contain the following: Assuming, arguendo, that the Herfindahl index numbers given in the complaint are valid, this alone does not constitute proof of any "market power" or justify FTC's intervention. The Herfindahl index is nothing more than a predictor of whether FTC (or the Department of Justice) will pursue legal action. As economics professor Dominick Armentano explained, there is no objective economic merit in the Herfindahl index: 'Although the general public has the impression that there must be some good reason for the antitrust authorities' choice of particular limits in the Herfindahl index of market concentration, these limits are completely arbitrary. No one—and certainly not the antitrust authorities—can ever know whether a merger of firms that creates, say, a 36-percent

key issue in making and interpreting the HHI computations is the appropriate definition of the market. Rasmussen's analysis assumes that the relevant market is solely the quebracho market. However, this assumption, which may be reasonably accurate in the very short term, is certainly incorrect in the longer term (even a few months), because of the possibility of substitution of other tannins for quebracho. A well-known antitrust case, *United States v. du Pont & Co.*, 351 U.S. (1956) illustrates the point. This complaint, filed originally in 1947 charged du Pont with monopolizing, attempting to monopolize and conspiracy to monopolize interstate commerce in cellophane and cellulosic caps and bands in violation of Section 2 of the Sherman Act. Over the years covered by the suit du Pont had a 75% share of the cellophane market; the only other competitor, Sylvania produced about 25% of U. S. cellophane. The computed HHI for this two-firm market would be $(75)^2 + (25)^2 = 6,250$, well above the threshold for a concentrated market.

However, as was argued successfully before the court, there were many relatively close *substitutes* for cellophane—indeed, cellophane constituted less than 20% of all "flexible packaging material" sales. The appropriate market in the du Pont case included all the producers of other flexible packaging materials, including opaque non-moisture-proof wrapping paper designed primarily for convenience and protection in handling packages, moisture-proof films of varying degrees, non-moisture-proof films, and foils and paper products. Justice Reed of the Supreme Court delivered the opinion, which states in part,

"During the period that is relevant to this action, du Pont produced almost 75% of the cellophane sold in the United States, and cellophane

market share, or one that raises the Herfindahl Index by 150 points, can create sufficient economic power to reduce market output and raise market price. No one knows, or can know, whether monopoly power begins at a 36 percent share or a 36.74-percent share. Neither economic theory nor empirical evidence can justify any merger guideline or prohibition.

Armentano, D.T. (1999). Antitrust: The Case for Repeal, 2nd Ed. Ludwig Von Mises Institute.

¹¹ One writer (Rhoades, 1993) for example, in an analysis of the HHI noted, "In conclusion, note that, although the HHI is a useful tool in merger analysis, particularly as an initial screening device, other factors are considered in an economic analysis of competition."

¹² See http://www.ripon.edu/faculty/bowenj/antitrust/dup-celo.htm.

¹³ As noted, merger guidelines using the HHI were not specified until 1982. Nonetheless, these calculations estimate the HHI for this market during those years.

constituted less than 20% of all 'flexible packaging material' sales. The court below found that the 'relevant market for determining the extent of du Pont's market control is the market for flexible packaging materials, and that competition from those other materials prevented du Pont from possessing monopoly powers in its sales of cellophane."

In this example, it is the presence of substitutes (not necessarily identical) that defines the appropriate market for analysis. And, indeed the HHI for the "flexible packaging material" industry would have been much lower.¹⁴

So it is with the quebracho analysis; the fundamental question is whether the relevant market is solely "the quebracho market" (in which case the Rasmussen HHI calculation would be appropriate), or "the market for vegetable tannins," or some yet broader term (vegetable tannins and syntans). In one part of the Rasmussen (2005) report (see pp. 7, 11, 14, especially pp. 28, 29) the claim is made that the relevant market is for quebracho alone and, therefore, that the quebracho producers have monopoly or nearmonopoly power—certainly this is the assumption that is required to justify the calculation of a two-firm HHI and later (Rasmussen, 2005, p74) a three-firm HHI, with the addition of DNSC as a third competitor in the event that DNSC goes ahead with the sale. Indeed, Rasmussen claims (Rasmussen 2005, p74) that "DNSC's participation in the quebracho market would improve the competitiveness of the quebracho market by offsetting the monopolistic power that currently exists.¹⁵"

Yet in other parts (see e.g., pp. 11-14) the Rasmussen (2005) report concedes that there are viable substitutes for quebracho. For example, on page 11, this report quotes an

¹⁴ The availability of substitutes clearly argues for a broadening of the definition of the market. This is not necessarily the case with all markets. The Rasmussen HHI calculation would be appropriate if there were no substitutes. Under some circumstances (not applicable here) it might be appropriate to segment the market, which might increase the HHI. Lipsey *et al.* (1984) noted that concentration ratios (a forerunner of the HHI) in national (US) cement sales are low, "but they understate the market power of cement companies because heavy transportation costs divide the cement *industry* into a series of regional *markets*, in each of which there are relatively few firms." The point of this example is that it requires care to identify the appropriate market when using concentration ratios or HHIs to characterize competition.

¹⁵ Taken in isolation, this is hardly a justification for DNSC sales. Nearly all markets have producers with some degree (however small) of monopoly power. If the elimination of market power of the stockpile material producers is the criterion, *ipso facto*, then there would be no need

industry expert, Shep Hermann of the Hermann Oak Leather Company as stating that substituting quebracho for wattle is "quite easy" in their leathers. The summary comment on page 13 the Rasmussen report states:

"In summary, there are several indications that the impacts of DNSC quebracho sales will not be limited to the quebracho industry alone. Wattle extract is a chemically similar material with a significant market."

The presence and availability of these quebracho substitutes and the ease of substitution is what determines the appropriate basis for calculating the HHI and for characterizing the market.¹⁶

The Chamber producers claim that they have only limited control over actual prices paid¹⁷—at least in the intermediate or long term these producers are more nearly "price takers" than "price makers." Overall market conditions including the demand for shoes, consumer tastes regarding the composition of shoes, and the prices and availability of quebracho substitutes, determine prices.

to have an "undue disruption" restraint as adding suppliers would be a clear social benefit in every case.

Technically, it is the value of the cross-elasticity of demand that determines the proper borders of the relevant market (Baumol and Blinder, 2001). In this case it is the percentage change in quebracho demand associated with a 1% change in the price of one of (each of) the vegetable tannin or synthetic substitutes. As noted elsewhere in this report, no econometric analysis of the quebracho or vegetable tannin industries has been published. Nonetheless, as stated in both the Everest (2004) and Rasmussen (2005) reports there are substitutes for quebracho extract. Sr. Diego Ramiro Guelar (Argentinean Ambassador to the US) stated in a November 14, 2002 letter to Mr. Richard V. Myers (US Dept. of Commerce) "The industry and the regional economies concerned are highly vulnerable to international market trends and have undergone a dramatic adjustment to changing patterns in demand in the recent years. Markets for vegetable tanned leather have consistently declined in the recent decades, due to changing consumption patterns (rubber soles vs. leather soles) and the existence of substitute products, either from vegetable or synthetic origin, which makes for a very demanding and competitive market."

¹⁷ Trivially, they have power over asking or list prices. The question is what control they have over prices actually paid?

Perfect Competition

The Rasmussen (2005) report goes into considerable detail to argue that the quebracho industry does not fulfill all the criteria devised by economists to characterize a perfectly competitive industry. Thus, for example, the Rasmussen (2005) report discusses such topics as market transparency (pp 32 ff), commodity standardization (pp 30 ff.), and the presence of price differentiation (pp 34 ff). The intent of these points is presumably to argue that the specific price projections included in Everest (2002, updated 2004) based on static equilibrium analysis are incorrect (more below) because the assumptions of a perfectly competitive market are not fulfilled. Again, reference to the calculations shown in Table 1 is instructive. ECA attempted to provide a bound on the possible price effect by assuming a perfectly competitive industry and calculating the new equilibrium price resulting from introducing additional supply. The assumption of a perfectly competitive market can be challenged—some would say that there are no perfectly competitive markets—but that is not central to the analysis. As shown in Table 1 even if there was no price impact, Chamber producers would be significantly affected. And, even if the market was imperfect, it is likely that there would be some price impact. Table 1 shows that even small price impacts have great leverage.

Many of the detailed points raised in the Rasmussen (2005) analysis are incorrect. For example:

Rasmussen (2005) argues (p36) "The presence of such a variety of process (sic, presumably prices) is clear evidence of price discrimination. This indicates that the quebracho market operates in conditions far removed from perfect competition." Many industries generally regarded as highly competitive—such as agriculture—engage in some form(s) of price discrimination. Thus, for example (Lipsey *et al.* 1984) state "Raw milk is often sold at one price when it is to go into fluid milk but at a lower price when it is to be used to make ice cream or cheese."

¹⁸ The Rasmussen (2005) report provides information that shows variability in prices among countries and cites information on various grades with differing technical specifications. What this *proves* is that there is price *differentiation*, not necessarily price discrimination. With price differentiation, differences in prices reflect differences in marginal cost (Miller 1982). With price discrimination, differences in prices do not reflect differences in marginal cost. We have not made this analysis, but neither did Rasmussen (2005).

Rasmussen (2005) argues (pp 30 ff) "The physical specifications of quebracho extract are far more variable than the example in Table 10 [NYMEX Platinum Specifications]. Even when the products are limited to those used for tanning leathers, there are several types and brands available." It is certainly true that quebracho extract is sold in a variety of grades. But this cannot be the sole criterion that serves to define whether or not the market is competitive. There are also different grades of many agricultural products. For example, the US Department of Agriculture recognizes eight grades of meat; prime, choice, select, standard, commercial, utility, cutter, and canner. 19 U.S. egg grades (for which there are explicit specifications) include Grade AA, Grade A, and Grade B; eggs are also grouped into defined size or weight categories including jumbo, extra large, large, medium, small, and peewee—18 combinatorial possibilities in all²⁰ without consideration of the egg color (white or brown)! Flour grades include straight, clear, fancy patent, short patent, medium patent, long patent, fancy clear, first clear, and second clear.²¹ Agricultural markets are often cited in economics textbooks as examples of highly competitive if not perfectly competitive industries.

Quebracho Extract Import Prices

Rasmussen (2005, pp. 34 ff.) provides statistical data on quebracho extract import prices for several countries and argues that, because these vary by country and year, price discrimination is proven. Members of the Argentine Chamber (see Chamber Affidavit) note that the actual market situation varies by country for reasons such as:

- ➤ **Product specifications**: There are different product requirements for tanners in different countries, depending in part on the ultimate products being made.
- ➤ Freight: The Rasmussen report uses CIF prices. Freight costs are very different from country to country. In addition, oil price increases have doubled freight costs and their incidence in recent years.

¹⁹ See, for example, http://www.ams.usda.gov/kidsweb/beefgrades.htm.

²⁰ See, for example, http://www.ams.usda.gov/poultry/standards/AMS-EggSt-1995.htm.

²¹ See, for example, http://www.theartisan.net/flour milling of.htm.

- ➤ **Duties/taxes**: Taxes and duties vary by country. For example, according to Chamber producers in almost all countries in Latin America, North America, and Europe, duties/taxes on quebracho imports are quite low. But in many Asian countries duties/taxes on quebracho imports are quite high (15 30% without considering the *Value Added Tax* [VAT]). In India, for example, quebracho carries an extra duty (compared to mimosa) of 16% over and above the basic duty.
- ➤ **Distribution system**: Chamber producers claim that the distribution network (not necessarily under their control) differs from country to country. In some countries nearly every customer purchases directly from quebracho producers. In other countries it is necessary to purchase through a distributor (who holds an import license), which depresses the import price by the distributors' costs and profits.

The overall market has numerous complexities. But the mere fact that import prices differ by country does not prove that there is no price competition and/or that the Chamber producers enjoy a monopoly.

Miscellaneous Other Errors

Members of the Chamber read the DNSC analysis with interest. They looked to see if the data, information, and market insights they provided were incorporated into the DNSC analysis. Chamber members found numerous large and small errors in the DNSC analysis. Key errors are emphasized in this report. Examples of some additional errors include (see Chamber Affidavit):

"We believe the argument presented by the DNSC is flawed and have provided the rebuttal above to show that a DNSC sale would negatively impact the current QE market and the Chamber. However, we also note there are significant inconsistencies and factual errors within the DNSC document (Rasmussen, 2005) that undermine the argument for a DNSC sale. Major errors involve the methods used to calculate the US imports, exports and consumption of QE, and general errors regarding the tanning industry. For example, the DNSC builds an argument with data that mixes tanning and non-tanning extracts, and mixes QE with other types of extracts (pp. 8, 10, 11, 16). DNSC is comparing apples to oranges and ultimately presents economic figures that appear inflated. The inflated figures serve to reduce the overall impact of the DNSC sale on the QE market; a situation favorable for the DSNC argument.

Additionally, the DNSC report presents data that suggests a questionable knowledge of the leather tanning market. For example, the Chamber does not agree with the assertion made on pg. 64 that vegetable tannins account for 30%-40% of the cost of shoe sole leather. The Chamber has provided information to DNSC indicating that the cost of the tannin is roughly 10% of the total cost of shoe sole leather. These are only two examples of the errors in the DNSC document but serve to illustrate the point that the analysis is flawed and biased in favor of the DNSC."

Reprocessing Costs and Substitution of Reprocessed Quebracho

Rasmussen (2005, pp. 48 ff.) claims that the ECA analysis is flawed because no explicit estimate is made of the costs of reprocessing the DNSC quebracho. We made no such estimate because this is not our area of expertise and, more to the point, the actual reprocessing cost is only tangentially relevant. If the prospective purchaser of the DNSC material is rational, the estimated conversion cost must be sufficiently low to permit the prospect of a profit—with some allowance for uncertainty. The purchaser of the DNSC quebracho certainly does not expect to charge a premium for this reprocessed material. Therefore, the price at which the reprocessed quebracho will be sold to tanners is likely to be at or beneath the prevailing market price.

We contacted representatives of the Argentine Chamber and asked them whether or not the \$560/MT estimate of reprocessing costs contained in the Lyons declaration cited in the Rasmussen report was accurate—or at least plausible. Their response (in the Chamber Affidavit) indicates that there is insufficient information provided to evaluate the accuracy of the estimate. For example, the report does not say what sort of reprocessing (e.g., simple grinding, to "in depth" chemical transformation) is required, nor where reprocessing will take place (labor, freight, and transportation costs are relevant). And, despite the fact that the Argentine Chamber has purchased 20,000 tons of quebracho from DNSC in fiscal years 2002 and 2003, the Chamber producers have not yet reprocessed or made any other final disposition of the material. The stated purpose of

these purchases was to prevent a substantial disruption in international quebracho markets. In remains in warehouses while Chamber producers evaluate options.²²

However, if the \$560/MT reprocessing cost is accurate, it follows that the purchaser must be anticipating that the resulting reprocessed quebracho will enter the market as a direct substitute for new quebracho. Rasmussen (2004, restated in 2005 p. 49) argued as follows:

"Although DNSC has offered quebracho tannin for several years, it has not received prices near the ["market"] prices indicated in the Everest Report. In fiscal 2001, DNSC sold about 1,000 MT of quebracho extract at an average price of about \$33/MT. This is only 8% of the price received by quebracho producers at that time. In spite of a 92% discount, DNSC was only able to sell 2% of its annual sales authority. This represented a little over 2% of the world quebracho market.

It stands to reason that if DNSC's material could compete with new quebracho extract as assumed in the Everest Report's test cases, quebracho buyers would pay a similar price. Furthermore, if DNSC offered the same material at a 92% discount, tannin buyers would have substituted DNSC material for other quebracho extracts.

DNSC's material could only compete as effectively as projected by the Everest Report's test case if it is perceived as essentially the same product. It is clear that buyers of DNSC's material do not view the material as an acceptable substitute since dramatic discounts have not led to dramatic sales."

Obviously, the current buyer for the quebracho extract believes that it must be competitive with new quebracho if willing to pay the DNSC stockpile price and the stated reprocessing cost (a total acquisition cost of 121 + 560 = 681/MT).

²² In a letter to Ms. Terri Robl (US State Dept.) and Mr. Richard V. Myers (US Commerce Dept.) the Argentine Chamber commented as follows on these materials. "These materials are warehoused in the USA and the Chamber has no use for them. Except for a very small tonnage that has been sold to local tanneries, most of the tonnage removed or about to be removed represents a substantial loss to our industry (both the price paid to DNSC and the transportation, handling and warehousing costs incurred). As we stated in our BAFO [best and final offer], we have bought these volumes with the sole purpose of preventing a substantial disruption of our markets, were these materials to reach our international markets. As we also stated in our [best and final offer] BAFO, it is not feasible to reprocess the materials in our factories and no other disposal options other than the ones recommended by the [Market Impact Committee] MIC to DNSC seem realistic in the short term." Material in square brackets added for clarity.

As noted above, Chamber members offered to purchase (and subsequently purchased) DNSC's stockpiled quebracho for sale, reiterating its previously expressed concern that "[u]nder the present conditions of international recession and severe economic problems in Argentina, any significant disposal would present severe economic consequences in the industry." The Chamber purchased this material to avoid market disruption, not to reprocess and resell. This said, the Chamber believes that the DNSC material can be adequately reprocessed so that it can substitute (in whole or part) for new material. On this subject, the Chamber Affidavit states:

"The allegation that DNSC material is not a substitute for our production is just plain wrong. There are hundreds of tanners throughout the world whose process and quality requirements allow them to replace partially or totally our products with the DNSC material. The choice and the alternatives are not binary as DNSC implies. Many tanners can partially replace our product with a lower quality material without significantly altering the overall performance of their leather. If DNSC provides a new source of extract at a low cost it will, without any doubt, generate this replacement. This will reduce the tonnage we sell and will also press our prices down during the bargaining process in our attempt not to lose the order."

The key points are that the reprocessed quebracho will displace "new" material and that this material is likely to be resold for a price that is at most equal to (but probably less than) the present market price.²⁴

²³ As quoted in United Stated District Court for the District of Columbia Chamber of Argentine-Paraguayan Producers of Quebracho Extract v. Cornel A. Holder, Administrator, Defense National Stockpile Center, et al., Civil Action No. 04-0426 (ESH).

²⁴ Even if it is assumed that the reprocessing cost is so high that the total of the purchase and reprocessing cost is greater than the prevailing market price for quebracho, the ultimate sale price will not exceed the present market price for quebracho. In this event, the trader will have made a poor bargain, but the cost will be a sunk cost and the trader will have to sell the reprocessed material at a loss. It certainly will not command a premium price.

DNSC Analysis Supporting Closure of the Formosa Plant

DNSC (Rasmussen, 2005 pp. 62 ff.) purports to show that the Chamber producers (taken as a whole) would be better off if the smaller Formosa plant were closed. This assumes that some production now done in Unitán plants would be transferred to Indunor, increasing its capacity utilization. The DNSC's calculations suggest that aggregate and per firm industry profits would increase—with or without DNSC sales. Such an administered solution is certainly counter to free market traditions and, it might be argued DNSC has no brief to formulate industrial policy for sovereign governments. As it is, absent DNSC sales, all three plants are operating above their breakeven levels. Unitán has both strategic and humanitarian reasons to keep its plants open—even if this does not maximize profits. As stated in the Chamber Affidavit:

"The DNSC states correctly that if the Formosa plant were closed, aggregate industry profits would be higher. Unitán has multiple objectives in keeping the Formosa plant open, including: (1) protecting 2000 or more jobs in the poorest province in Argentina; (2) avoiding closure costs, and (3) maintaining capacity in the event that we find new markets over time, which would increase capacity utilization and provide additional profit opportunities. The fact that the Formosa plant remains in operation is inconsistent with allegations made elsewhere in the Rasmussen report that we are a monopoly. If we were a monopoly, why would we not agree to close a factory and enjoy higher profits? The answer is that we are not a monopoly and that while we compete as hard as we can, the Chamber members feel we have a social responsibility and fight hard before closing any plant—although other quebracho producers have closed plants. When DNSC sales displace our revenues, the time we have to reverse our current financial difficulties is reduced. Again they use the rationale that since someone has cancer, you can do anything that reduces the person's life span since they will die anyway."

As noted above, whether or not aggregate profits could be improved by closure of the Formosa plant, it is now operating above its breakeven level. As demonstrated in the calculations shown in Table 1, the DNSC sale will adversely impact profits—and might result in losses. It is one thing to keep a profitable plant in operation—even if more profit might be obtained by closing it—and another to keep a money-losing plant in operation.

DNSC Claims that Prior Stockpile Sales have Not Harmed the Market

DNSC alleges (see e.g., pp. 27, 40-41) that historically DNSC (and predecessor agency) sales have not harmed the market. The principal justification for this claim is contained in Fig. 13 that plots DNSC sales and U.S. quebracho prices and the comment that there is only a weak negative association between DNSC sales and price. Rasmussen also states (Rasmussen 2005, p 27) that from 1980 through 2001, annual stockpile sales have averaged 2,200 MT/yr. Three major comments are relevant:

- ♦ The average annual sales volume (2,200 MT) is significantly smaller than the DNSC sale volume considered in this analysis (6,000 MT). Moreover, as stated in the ECA reports, sales of quebracho have decreased in recent years, so the proportional impacts of these sales amounts on the total market was smaller in the past.
- The recent sales of quebracho to the Chamber would not be expected to have a depressing effect on quebracho markets since (see above) none of it has been resold. Thus, it did not enter the market and would not be expected to affect prices.
- ◆ A more appropriate measure of potential market disruption is not sales, but rather eventual releases into the market—and to which markets. As noted in the attached Chamber Affidavit:

"The DNSC analysis of the effects of prior Stockpile sales does not take into consideration the fact that there is a lag between their deliveries and the moment any tonnage reaches a specific market (including the local market). The lag results for many reasons, including the re-milling and repackaging that any trader performs before delivering the material to a customer plus the time the customer might choose to keep that material in its warehouse. DNSC also fails to clarify that most of the previous releases have been awarded to companies that have used it or sold it within the USA and only a small portion of those releases probably left the USA. Now the story is quite different; 6,000 tons (four times the historic volume) would be released to two companies that have no use whatsoever in the USA for that material and that will, for the first time, target the industry's international markets.

At least in one case, the targeted market is Italy, the quebracho industry's key market, which has suffered a severe decline during the last four years. Lyons/Volpi has been awarded 3,000 [sic] MT by the DNSC. It has clearly stated that it will use/sell this tonnage in the Italian market. Our industry's exports to the Italian market have been dropping consistently form 2001 to 2004. The tonnage exported has been 13,500/12,700/12,257/9,626. This means that our sales have declined almost 30% in only four years. This makes the Volpi award much more

sensitive and its volume alone amounts to almost 30% of the Italian market.

Similarly, DNSC's award to Westan will reach our international markets without a shadow of a doubt. Westan is not producing leather any more, having closed its tannery in February 2005. It, therefore, has no use for any quebracho and whatever it receives, will resell—most if not all to international markets."

◆ The DNSC analysis does not attempt to examine the relationship between quebracho plant closures (three in the past ten years) and sales.

DNSC Attempts to Define "Undue Disruption"

It is also appropriate to comment on the DNSC attempts to define "undue disruption." The companion legal analysis provides additional relevant material on this topic.

DNSC concedes that the quebracho market will be disrupted. It says in part (Rasmussen, 2005, p74):

"Market disruption can be defined as any interruption of the normal course or unity of the market. Since any sale by DNSC could be considered a 'disruption,' the crucial element is the degree of the disruption as defined by the word 'undue."

DNSC then states (Rasmussen, 2005, p74):

"In every market it enters, DNSC adds to the available supply. The consequences of an increase in supply will always benefit consumers by increasing competitive pressures on suppliers. Depending upon the pricing mechanism, the prices received by suppliers may also decline. Even without price declines, DNSC sales are likely to reduce supplier's revenues because of consumers substitution on new production with DNSC material...DNSC sales can be viewed as an appropriate remedy to the current inefficiency of the quebracho market. DNSC's participation in the quebracho market would improve the competitiveness of the quebracho market by offsetting the monopolistic power that currently exists."

DNSC then goes on to calculate that the HHI would be lowered by the DNSC supply.

In short, DNSC concedes that the quebracho market will be disrupted, but claims that, far from being "undue," this disruption serves the useful social purpose of reducing the alleged monopoly power of quebracho producers *by substitution of DNSC quebracho*

for new quebracho.²⁵ Thus, DNSC concedes that the DNSC supply will reduce the quantity provided by the Chamber. Moreover if, as DNSC argues, consumers receive benefits from the additional supply, these benefits can only be in the form of reduced prices! If prices did not fall, it is hard to imagine that consumers would receive any benefits.²⁶ Thus, for these benefits to accrue, it follows logically that DNSC material must substitute for new quebracho and market prices must fall. In short, this amounts to a concession that even the least impact (the constant price case) calculated in Table 1 understates the actual impact on the Chamber producers, because consumers would benefit from a fall in market price. In essence, DNSC concedes that the impact on producers' profits would be greater than a 57% profit reduction. Given the sensitivity of the economic impact on producers to even a small percentage reduction in market price, the impacts could be considerably more significant.

Ultimately, the courts will have to decide whether a reduction of producer profits of more than 57% (and even the possibility of losses if prices were to fall by as little as 6.9% or more, see Table 1) constitutes "undue disruption." To our knowledge there is no single "bright line" defining "undue." We submit that such an impact is certainly material.

For reasons discussed above, we also reject the claim that the quebracho industry is a monopoly. It is a fragile industry with historically declining markets and a record of plant closures providing employment to 8,000 workers in an economically disadvantaged area with high unemployment. Placing this industry in further peril doesn't seem like justice.

²⁵ As noted above, if reducing the power of producers is seen as unequivocally good, then all DNSC sales are likewise worthwhile and there would be no need for Congress to have addressed the possibility of "undue" disruption.

In principle, consumers might benefit if the quebracho sold by DNSC were of some premium quality or otherwise particularly desirable. However, DNSC implies that, if anything, the quality of the reprocessed quebracho would not be equivalent to new quebracho.

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