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August 27, 2007

Donna N. Kooperstein Chief, Transportation, Energy & Agriculture Section Antitrust Division Department of Justice 325 7th Street, NW, Suite 500 Washington, DC 20530

Re: Hard Copy of Tunney Act Comments in Monsanto/Delta and Pine Land – Filed Previously via E-Mail on August 27, 2007

Dear Ms. Kooperstein:

Enclosed please find comments of the International Center for Technology Assessment and Center for Food Safety in U.S. vs. Monsanto Company and Delta and Pine Land Company, pursuant to Section 2(b) of the Antitrust Procedures and Penalties Act, 15 U.S.C. § 16 (the "Tunney Act").

The enclosed comments and report were sent as email attachments to donna.kooperstein@usdoj.gov on August, 27, 2007. We trust you received them. The enclosed comments have been slightly reformatted from the electronic version for ease of reading, with minor errors corrected and slight revisions made. The enclosed report is identical to the e-mailed version. For your convenience, I have also enclosed a report by the USDA Agricultural Marketing Service that is frequently referenced in our comments.

Sincerely,

Bill Freese, Science Policy Analyst International Center for Technology Assessment Center for Food Safety

Phone: 202-547-9359 x14 E-mail: <u>bfreese@icta.org</u>

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

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UNITED STATES OF AMERICA, DEPARTMENT OF JUSTICE ANTITRUST DIVISION))))
Plaintiff,)
v.) Case: 1:07-cv-00992
MONSANTO COMPANY) Judge: Urbina, Ricardo M.
and)
DELTA AND PINE LAND COMPANY)
)
Defendants)

TUNNEY ACT COMMENTS OF THE INTERNATIONAL CENTER FOR TECHNOLOGY ASSESSMENT AND CENTER FOR FOOD SAFETY ON THE PROPOSED FINAL JUDGEMENT

The International Center for Technology Assessment (CTA) is a non-profit, bi-partisan organization committed to educating the public and decision-makers about the economic, legal, ethical, social and environmental impacts that can result from applications of technologies or technological systems. The Center for Food Safety (CFS) is a national non-profit membership organization founded by CTA to educate the public and decision-makers about the impacts of agricultural technologies and food production systems; to secure adequate regulations to protect the general public and farmers from adverse effects of such systems; and to promote sustainable agriculture. CFS has considerable expertise in the field of agricultural biotechnology.

In February 2007, CTA and CFS published a comprehensive review of the proposed merger entitled "Cotton Concentration Report: An Assessment of Monsanto's Proposed Acquisition of Delta and Pine Land." We have appended this report, together with authoritative USDA statistics on cotton varieties planted in 2006, as integral parts of these comments. In these comments, the CTA-CFS report is referenced "CTA," followed by section number, or by figure, table or appendix number, as indicated. USDA's report is referenced USDA AMS 2006.

CTA and CFS submit these comments and attachments pursuant to Section 2(b) of the Antitrust Procedures and Penalties Act (APPA), 15 U.S.C. § 16 (the "Tunney Act"). For the reasons discussed below, CTA and CFS believe that the Dept. of Justice's proposed final judgment (PJF) in this case is not in the public interest, and therefore must be rejected by this Court.

I. Background on the Cotton Seed Industry

Some basic background on the cotton seed industry is required to understand the competitive issues raised by the proposed merger.1 There are two major types of cotton seed: 1) conventional; and 2) genetically modified or "traited" cotton seed. Cotton is grown in four major regions of the U.S.: the MidSouth (aka South Central), Southeast, Southwest and West. Many different varieties of cotton have been developed by breeders. Cotton varieties have been bred for different combinations of properties, such as yield, disease resistance, suitability to certain climates or soil types, as well as quality characteristics such as fiber strength and length. "Traited" cotton seed is developed from conventional cotton varieties by means of genetic modification, which is used to introduce or "introgress" "cotton traits." At present, cotton traits are limited to "herbicide-tolerance" (HT) and "insect-resistance" (IR). The HT trait allows farmers to spray an herbicide on the cotton plant to kill surrounding weeds. The IR trait protects cotton from certain insect pests. Conventional cotton does not contain these traits. (For a fuller description of the function and value of cotton traits, see CTA, 2.3). In 2006, the USDA identified 203 cotton varieties planted in the U.S.: 36 conventional varieties and 167 traited varieties (CTA, 2.4, Figure 7).2

The merger involves two major markets. One market is the development, commercialization, and sale of cottonseed, both conventional and traited. The top three firms in this market are responsible for 92-93% of U.S. sales: DPL (51%), Bayer CropScience (30%) and Monsanto's Stoneville (12%) (CTA, 2.1.1, Figure 1). The second is the "upstream" market for development of cotton traits. Monsanto has a 96% market share in traits, with Bayer and Dow accounting for the rest. Monsanto's HT traits are Roundup Ready and Roundup Ready Flex, both of which confer resistance to glyphosate herbicide; Monsanto's IR traits are Bollgard and its successor, Bollgard II. The only other commercialized cotton traits are Bayer's LibertyLink (HT) and Dow's Widestrike (IR). 95% of traited cottonseed contains only Monsanto trait(s); 4% only Bayer's trait; and 1% a combination of a Monsanto and either a Bayer or Dow trait (CTA, 2.1.2, Figure 2).

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¹ Throughout these comments, we reference the attached "Cotton Concentration Report" for fuller discussion of issues raised. References are of the form "CTA, Section #").

² Unless otherwise noted, statistics on cotton varieties planted in the US are derived from USDA, Agricultural Marketing Service, "Cotton Varieties Planted: 2006 Crop," which contains detailed information on varieties of cotton planted. See http://www.ams.usda.gov/cottonrpts/MNXLS/mp_cn833.xls.

II. DoJ Construes Relevant Product Market Too Narrowly

DoJ defines the relevant product and geographic markets as "the development, commercialization, and sale of traited cottonseed for the MidSouth and Southeast" (CIS, p. 9). The DoJ bases its product market definition ("traited cottonseed") on several empirically false statements. First: "Farmers grow substantially all of this important crop [cotton] from cottonseed that has been enhanced through the introduction of biotechnology traits ("traited cottonseed")" (Complaint at 2). Second: "Today, almost all cottonseed varieties planted in the United States are traited...." (Complaint at 22). In fact, USDA data show that this is far from the case. First, of the 203 cotton varieties planted in 2006, just 167, or 82%, were traited. The remaining 36 varieties (18%) were conventional varieties (CTA, 2.4, Figure 7). Hence, more than 1 of every 6 cotton varieties was conventional in 2006. Thus, traited cottonseed can by no stretch of the imagination be considered to comprise "almost all of cottonseed varieties planted in the United States."

Acreage planted to traited vs. conventional cottonseed breaks down in a similar manner. USDA data report 88% of US cotton acreage planted to transgenic varieties, versus 12% planted to conventional varieties. 12% of the 15 million acres of cotton planted in 2006, or 1.8 million acres, were hence conventional (CTA, p. 20). To say the least, it is difficult to understand how DoJ can claim "substantially all" U.S. cotton is produced from traited seed when nearly one in eight acres, comprising almost 2 million acres, is planted to conventional seed.

This faulty and overly narrow definition of the relevant product market leads DoJ to neglect several anticompetitive effects of the merger.

A. Declining Availability of Conventional Cottonseed, Higher Seed Prices

As noted above, DoJ defines the relevant product market as "traited cottonseed." This definition implicitly ignores the very existence of conventional cottonseed, which forms a significant share of both cotton varieties and acreage planted in the U.S. However, the PJF proposes a partial remedy, albeit in an incidental and unsatisfactory manner, for this sector of the cottonseed market (i.e. conventional cotton varieties) that goes completely unanalyzed in the Complaint and CIS: "The proposed Final Judgment allows Defendants to continue, for a limited period of time, to sell conventional versions of some of the divested DPL varieties currently being sold by DPL in and outside the United States, *providing for a continuity of supply of conventional cottonseed*" (PJF, pp. 17-18, emphasis added). The evident need for a remedy expressed in the PJF stands in stark contradiction to DoJ's complete neglect of conventional cottonseed in its definition of the relevant product market in the Complaint and CIS. Because the CIS completely lacks an analysis of conventional cottonseed, an in fact virtually ignores its existence, DoJ has absolutely no basis for proposing, or assessing the adequacy of, the remedy cited above.

In fact, the merger will very likely have a number of serious anticompetitive impacts related to the conventional cottonseed market. First, availability of conventional cottonseed varieties will decline. DPL sold 15 conventional varieties in 2006, 40% of the 36 conventional varieties planted in 2006 (CTA, 3.2). Monsanto intends to reduce the number of conventional varieties offered by DPL, through "accelerat[ing] biotech trait penetration" (CTA, 3.2). Secondly,

because conventional seed varieties are on average two to four times less expensive than traited seeds (CTA, 3.3, Figure 5, Appendix 3, and related discussion in text), farmers who prefer conventional seeds but cannot find suitable varieties will face substantially increased seed costs as well as reduced choice. See CTA, 2.4 for further discussion of the merger's adverse impacts on the conventional cottonseed market.

B. Declining Availability of Less Costly Traited Seeds, Increasing Seed Prices

A closely related impact of the merger is reduced offerings of cotton varieties with less expensive single vs. more expensive "stacked" (two) traits, and reduced offerings of less expensive first-generation vs. more expensive second-generation Monsanto traits. For instance, Monsanto has pledged to "invest in penetration of higher-margin traits in Delta and Pine Land offerings." These proposed changes to DPL's product offerings (with respect to both conventional and less expensive traited seeds) are clearly not merely Monsanto's anticipated responses to farmer demand, but are expressions of Monsanto's carefully conceived strategy to increase profits through exercise of market power. These anticompetitive effects of the merger (reduced choices, increased seed prices) are addressed in detail in CTA 2.5, 3.3; Figures 5 & 6, Table 1 and Appendix 3).

III. DoJ Construes the Relevant Geographic Markets Too Narrowly

A striking feature of DoJ's settlement documents is the lack of any broader analysis of the cottonseed industry. One searches in vain for some argument or justification to explain DoJ's failure to: 1) analyze the national market in cottonseed; or 2) restrict the relevant geographic markets to the MidSouth and Southeast regions. On the first point, the CIS states clearly that: "The Complaint alleges that the likely effect of this acquisition would be to substantially lessen competition in the market for the development, production, and sale of traited cottonseed..." (CIS, p. 1), without, initially at least, restricting the anticompetitive impacts to specific geographic regions. Yet the national market is not analyzed. On the second point, beyond a bare mention of the existence of the Southwest and West geographic markets, neither the Complaint nor the CIS discusses the Defendants' involvement in these markets. Yet despite DoJ's failure to analyze either these two markets, or the national market, the CIS and PJF propose one remedy that explicitly addresses anticompetitive issues relevant to the national market in cottonseed (CIS, p. 21, discussed further below).

In fact, analysis of USDA data show that the Defendants' together have a substantial presence in both neglected markets: 29.16% of cottonseed sales in the important Southwest market (which includes Texas, the nation's leading cotton producer); and a still greater 40.51% of sales in the West.3

In the Southwest market, the merger would effectively result in Monsanto increasing its market share from 8.04% (Stoneville) to 21.12% (DPL), or an increase of over 2.5-fold. In the

³ USDA AMS 2006, cited above and attached. See Table entitled "Estimated percentage of upland cotton planted to leading specified brands by growth area, 2006 crop" p. 3. Note that DPL owns the Paymaster as well as the Deltapine brand. For documentation of this, see CTA, 2.1.1.

West market, Monsanto's post-merger share of cottonseed sales increases 3.6-fold, from 8.80% (Stoneville) to 31.71% (DPL).4 At present, these two geographic markets represent the only cottonseed markets in which the Defendants' competitors have a significant presence. The DoJ's CIS provides absolutely no analysis of how this substantial increase in Monsanto's post-merger market presence in these two important markets would affect competitiveness in the West and Southwest regions.

The concentration in these markets would increase substantially as a result of the merger, especially when considered in combination with Bayer's prospective acquisition of the Enhanced Stoneville Assets. Even without Stoneville, Bayer has a commanding 60.28% share of the Southwest market. With Stoneville, this presence increases to 68.32%, or over two-thirds of the market. In the West, acquisition of Stoneville would increase Bayer's market share from 20.22% (note that Bayer purchased CPCSD in 2006, see CTA, 2.1.1 for documentation) to 29.02%.

Post-merger, the combined market share of the top two firms in the important Southwest market (which as noted above includes Texas, the nation's largest cotton producer) increases to an astounding 89.44%, and the corresponding market share in the West market to 60.73%. Top 3 market share would become 93.29% in the Southwest, and 96.60% in the West. The post-merger share of the national cottonseed market of just the top two firms rises to 92%, creating a virtual duopoly in cottonseed, with the Defendants' controlling roughly 50% of the national market and Bayer controlling 42% (CTA, Figure 1).

Clearly, DoJ was remiss in not analyzing the merger's potential anticompetitive effects in the Southwest, the West, and nationally. The need for such an analysis is clearly indicated by DoJ's proposed remedy to the anticompetitive effects of Monsanto's restrictive licensing practices with third parties, which have allowed Monsanto to terminate licenses granted to cottonseed firms (licensees) which sell cottonseed containing non-Monsanto traits: "These changes will give these competing cottonseed companies the ability to partner with trait developers other than Monsanto without any financial penalty and to offer traits desired by farmers. Trait developers will thereby have access to *close to half of the current U.S. cottonseed market, without having to deal with the combined Monsanto/DPL*" (CIS, p. 21, emphasis added). Without having conducted any analysis of the national market in cottonseed, and having excluded from consideration two important geographical markets, DoJ is in no position to propose, or assess the adequacy of, a remedy that involves consideration of the national market in cottonseed.

The truth of this assertion is brought home by DoJ's reference, in the passage cited above, to "competing cottonseed companies." If DoJ had analyzed the national market, it would have found that there are virtually no competing cotton seed companies of any size still active, due primarily to numerous acquisitions over the past decades, and particularly the last few years, resulting in an extremely high level of concentration in the cottonseed industry. USDA data

⁴ Here, we assume that the market shares cited in the following discussion will not be altered by the Defendants' divestitures beyond that of Stoneville. The additional divestitures (e.g. of 20 DPL lines to Stoneville's acquirer and 43 lines to Syngenta) are described only in relation to the MidSouth and Southeast markets.

⁵ USDA AMS 2006, see table cited above. Note that Bayer owns not only the Bayer CropScience Fibermax brand, but also AFD Seed, which it purchased in 2005, and CPCSD (California Planting Cotton Seed Distributors), which it purchased in 2006. For documentation, see CTA, 2.1.1.

show clearly that the number of cottonseed firms with sales appreciable enough to register in its surveys has declined dramatically over the past several decades (CTA, 2.1.1, Appendices 1 & 2), and particularly over the last four years: from 19 in 2003, to just 9 in 2006. Accordingly, the number of smaller cottonseed suppliers other than the top three firms (pre-merger) has declined from 16 to just six (CTA, 3.1). In short, DoJ's proposed remedy in favor of "competing cottonseed companies" may soon be irrelevant, if the exit of smaller companies from the market continues, and is accelerated by the merger, as appears likely. Clearly, DoJ should have analyzed the merger's potential to accelerate the exit of smaller companies from the cottonseed market, and the associated anticompetitive harms this would likely have (enhanced potential for exercise of market power, declining choice of cottonseed varieties, increased seed costs).

IV. DoJ's PJF Represents an Unwieldy and Unenforceable Conduct-Based Remedy Masquerading as a Structural Remedy Based on "Divestitures" of Germplasm

The primary means by which DoJ addresses the anticompetitive harms presented by the merger involves "divestiture" of germplasm. DoJ acknowledges the crucial role of germplasm in developing and commercializing cottonseed in the Complaint:

"A company with a large collection of high quality, or elite, germplasm has a competitive advantage because the company has the ability to identify the best genetic material and use it in a wide variety of possible cross combinations, resulting in a greater likelihood of developing a successful variety." (Complaint at 5.)

In addition, DoJ recognizes that divesting Stoneville alone would not be sufficient to restore competition lost by the merger of Monsanto and DPL (CIS, p. 14). Accordingly, the PFJ requires Monsanto and DPL to "divest" various lines of germplasm beyond those of Stoneville. Below, we discuss a few of the many exceptions and conditions attached to these divestitures of germplasm that render them ineffective as a remedy.

A. DPL Germplasm

DoJ states that: "Defendants will divest twenty DPL conventional varieties" (CIS, p. 16). First, only 8 of these 20 varieties are either commercial lines, and/or parents of lines that have been sold commercially. Six of these eight lines are listed as commercially sold varieties in 2006, when they comprised, collectively, just 1.76% of US cotton planted in that year.6 DoJ makes much of the fact that some of DPL's best-selling cotton varieties were derived, over years of breeding efforts, from four of these eight lines (CIS, p. 16). Yet as DoJ also acknowledges elsewhere, development of successful commercial cotton varieties from even high-quality parental lines can take 8-10 years, and costs tens of millions of dollars. Whether an acquirer will

⁶ See Table B of Schedule B – Enhanced Stoneville Assets. Reference to USDA AMS 2006, cited above, shows that collectively, 00W12 (DP393), Delta Pearl, DP5690, DP491, DP565 and DP5415 comprised 1.76% of US cotton acreage in 2006.

be able to develop commercially successful varieties from such parental lines at all, especially given the presence in the marketplace of successful varieties already developed from them, is extremely uncertain. The time required for breeding work that might eventually result in commercially successful varieties is also uncertain, but could be substantial, and too long to promptly redress competitive harm, as merger guidelines require.

Twelve of the 20 lines are experimental lines with unproven and hence uncertain commercial potential. The acquirer (Bayer) may also lack the requisite expertise with cotton varieties of this type to effectively utilize them in breeding programs.

Still more troubling, Monsanto retains, or has the right to reacquire, substantial rights with respect to these 20 varieties (see Schedule B, Section 2, DPL Germplasm for the following discussion). For instance, Monsanto is entitled to re-acquire an exclusive license to sell varieties that are derived or bred from the DPL lines, and also contain only Monsanto traits. Recall that the chief value of these lines is as breeding stock. Secondly, Monsanto retains *exclusive rights* to sell any of the "divested" lines in foreign countries where DPL is currently selling them; and to retain sufficient quantities of these lines for further breeding work. Again, Monsanto can continue to breed with lines that DoJ chooses to designate as "divested."

B. Advanced Exotic Yield Lines

Similarly, the "divestiture" of "advanced exotic yield lines" also comes with numerous strings attached (Schedule B, Section 4). As with DPL Germplasm, Monsanto may retain "research quantities" of these lines "to enable them to continue their trait development research." This exception is particularly curious in that DoJ's rationale for the exceptions (here and for other germplasm) is to allow Monsanto to retain assets (and research rights to germplasm) that directly relates to trait development, while the advanced exotic yield lines were developed by Monsanto as part of a non-transgenic yield enhancement project; that is, as part of a project that involving traditional, non-biotech breeding work for development of higher-yielding varieties (CIS, p. 14-15). We note also that even DoJ admits that these lines will likely offer little value to competitors seeking to develop competing cotton varieties from them, at least within the term of the PFJ (CIS, p. 15, footnote 2).

C. VipCot Lines "Divested" to Syngenta

The "divestiture" of 43 of DPL's VipCot lines to Syngenta is similarly conditioned. Syngenta's "exclusive rights" to commercialize varieties developed from these lines is restricted to varieties that contain one of four traits (see Schedule C). If Syngenta were to develop a new trait not listed in Schedule C, and introgress it into a "null line" derived from one of these 43 lines, it could no longer commercialize it. This limitation is a significant restriction in light of the extremely high failure rate in agricultural biotechnology (CTA, 3.11, Appendix 7). This condition in effect puts DoJ in the unenviable position of "picking a winner" in a field littered with numerous failed trait development projects. The commercial prospects of any of these 43 lines is also highly uncertain. DPL once promised commercialization of VipCot varieties by 2006 (CTA, 3.4.1). The commercialization date for eight of these lines is now projected for 2009-2011, with the majority pushed off until beyond 2011. A company's projected commercialization dates for traited seed are notoriously unreliable. DoJ's uncritical reliance on the Defendant DPL's

(shifting) assessment of imminent commercialization of even just eight of the 43 VipCot varieties, a crucial element of the PJF's remedy to promptly restore competition, is naïve and inexcusable.

These are just a few of the many exceptions, exclusions and conditions related to the "divestiture" which renders them ineffective as remedies. We would note that such restrictions have two weakening effects. First, they limit the ability of extremely weak competitors to successfully develop competing traited cottonseed varieties in a field in which Monsanto already has overwhelming dominance (as evidenced by its 95-96% market share in traits). Secondly, they provide the virtual monopolist Monsanto with rights to continue to sell certain of the "divested" lines, and/or to utilize "divested" germplasm in further breeding work, advantages which can only act to consolidate its monopoly position and forestall meaningful competition. For a fuller discussion of the competitive strength of a post-merger Monsanto-DPL, see CTA, 3.10 and Appendix 5.

V. DoJ's Conduct-Based Remedy Imposes Undue Obligations for Regulatory Oversight, Which DoJ Has Neither Expertise Nor Resources to Execute

The numerous conditions attached to the sharing of rights to "divested" germplasm between Monsanto-DPL and Bayer-Stoneville and Syngenta imposes oversight obligations on DoJ which the Antitrust Division is ill-equipped to undertake. For instance, DoJ may be called upon to rule as to whether Monsanto has in fact complied with its obligation to provide Bayer with materials the latter needs to obtain regulatory approval of varieties Bayer develops from Null Lines derived from the "divested" advanced exotic yield lines, or as to whether compensation Monsanto seeks from Bayer for this task is in fact "reasonable" (Definitions, Null Line). Or, Dol may have to rule on whether any retention by Monsanto of research quantities of advanced exotic yield lines does or does not adversely affect Bayer (Schedule B, clause 4c). Clause 4d of Schedule B may further require DoJ to police Bayer with respect to acquisition of certain patents, as well as enforce breeding and resale restrictions, in relation to the advanced exotic yield lines. These are just a very few of the oversight and enforcement responsibilities with which DoJ has saddled itself in the PJF. An examination of Schedules reveals many, many more. Not only is DoJ likely unequipped, in terms of expertise, to fairly adjudicate these matters, the resource burdens placed on DoJ in attempting to do so are unacceptable. Finally, the exceedingly complex terms in the PJF provide numerous opportunities for evasion of the terms of the settlement, which could easily subvert the remedies proposed, inadequate as they are.

VI. Conclusion

DoJ's PJF is clearly inadequate to remedy the substantial anticompetitive impacts of the proposed merger. We have shown that DoJ has construed the relevant product and geographic markets too narrowly, and thereby failed to account for the merger's likely impact of enhancing the Defendants' potential for exercise of market power, leading to reduced availability of conventional and less expensive traited cottonseed, and thus reduced seed choices and increased

seed costs for cotton growers. Likewise, by ignoring the national, DoJ has neglected the precipitous decline in competition in the cottonseed industry as a whole that would likely be wrought by the merger, which also promises reduced choices and increased costs for cotton growers. By ignoring two important regional markets, DoJ has left unanalyzed the significant potential for anticompetitive impacts of the merger in the only regions where the Defendants' are not currently predominant.

We have also pointed out the unwieldy, "regulatory" nature of this supposed structural remedy, which in fact is an extremely burdensome conduct-based remedy of just the sort that DoJ has neither the resources nor the expertise to police, and which opens the door wide to subversion of the proposed remedies.

Finally, the proposed merger will create an extremely concentrated cottonseed industry dominated by two huge, vertically-integrated players (Monsanto and Bayer) which together will control 92% of the cottonseed market. Monsanto will doubtlessly be the dominant player in this duopoly, based on its current near-monopoly in cotton traits (95-96% market share), and on its equally predominant position in cotton trait research and development (CTA, 3.4.3, Appendix 5). The acquisition of DPL's abundant high-quality germplasm and leading cottonseed varieties (in exchange for Stoneville's much smaller germplasm assets) will consolidate Monsanto's predominant position in both traits and seeds. The merger will thus enhance Monsanto's market power, reducing seed choices and increasing seed costs for growers, with adverse impacts on US agriculture as a whole (CTA, 2.7 to 2.9, 3.10).

Therefore, we respectfully request the Court to reject DoJ's proposed final judgment as insufficient and contrary to the public interest.

Respectfully submitted,

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