

EVALUATING THE PUBLIC INTEREST: REGULATION OF INDUSTRIAL HEMP UNDER THE CONTROLLED SUBSTANCES ACT

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Farmers throughout the industrialized world grow hemp legally as a source for a diverse range of products including foods, fabrics, plastic, cosmetics, and building materials. Although hemp was once widely grown in the United States, modern efforts to cultivate hemp have been frustrated by federal drug-control laws because the Drug Enforcement Administration (DEA) does not distinguish between industrial hemp and psychotropic marijuana. Over the past decade, many states have enacted legislation liberalizing their laws regulating industrial hemp, and in 1999, North Dakota became the first state to create a full licensing scheme for hemp cultivation. However, farmers' efforts to benefit from their state licenses have been stymied by an inability to obtain licenses from the DEA, licenses that are required under federal law.

This Comment examines the legislative history of the federal laws regulating hemp and marijuana, and the standards that the DEA is directed to apply when reviewing the applications of prospective industrial hemp farmers. It argues that, pursuant to the factors outlined by Congress, the DEA cannot legitimately deny or delay licenses to applicants who have been licensed under state regulatory systems like North Dakota's. Finally, it explores possible avenues of recourse available under the Administrative Procedure Act for hemp-farming applicants whose requests for federal licensing are not timely approved.

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INTRODUCTION

Industrial hemp was a critical agricultural product in America for over four centuries. So important was hemp¹ to the earliest settlers that in 1619, the Jamestown colony passed a law making it illegal not to grow the crop.² Colonies in Massachusetts and Connecticut passed similar laws in 1631 and 1632.³ The first drafts of the United States Constitution and the Declaration of Independence were both penned on hemp paper,⁴ and hemp cultivation continued well into the twentieth century as patriotic farmers responded to the government's call by drastically increasing production during World War I and World War II.⁵ But, over the past seventy years, interpretations of narcotics laws by federal agencies,⁶ and the policies enacted in response to those interpretations, have completely obstructed industrial hemp cultivation such that crops have not been grown domestically since 1958.⁷ However, starting in the mid 1990s, an increasing number of states have introduced legislation to remove barriers to hemp production or research,⁸ and North

1. For the purposes of this Comment, hemp refers to industrial hemp with a THC content under 0.3 percent, while marijuana refers to the psychotropic drug having a THC content of between 3 and 15 percent. The terms hemp and industrial hemp are used interchangeably.

2. Affidavit of David West, Ph.D. at para. 34, *United States v. White Plume*, 447 F.3d 1067, 1072 (8th Cir. 2006) (No. CIV02-5071) [hereinafter *West Affidavit*], available at <http://www.gametec.com/hemp/Whiteplume.affidavit.pdf>; see also JACK HERER, *THE EMPEROR WEARS NO CLOTHES 1* (1998), available at <http://www.jackherer.com/chapter01.html>.

3. HERER, *supra* note 2.

4. *West Affidavit*, *supra* note 2, at para. 34.

5. See *infra* note 23 and accompanying text.

6. This Comment primarily focuses on the DEA's interpretation of narcotics laws. However, as will be discussed *infra* Part III.B, limitations on industrial hemp agriculture began in the mid-1940s with the Bureau of Narcotics, a now defunct branch of the Treasury Department.

7. JEAN M. RAWSON, *HEMP AS AN AGRICULTURAL COMMODITY 2* (2005). The report describes Jean Rawson as a Specialist in Agricultural Policy in the Resources, Science, and Industry Division of the U.S. Congressional Research Service. *Id.* at title page. According to David West, the last commercial hemp crop was planted in 1957. *West Affidavit*, *supra* note 2, at para. 38.

8. See RAWSON, *supra* note 7, at 2; *Vote Hemp*, <http://www.votehemp.com/state.html> (last visited June 7, 2009).

Dakota has created a full state regulatory scheme for hemp cultivation and has begun to issue licenses to prospective growers.⁹

State efforts, however, have been stymied by federal law enforcement. Other law review articles have explained how the campaign against marijuana waged between 1916 and 1937, in conjunction with technological limitations at the time the first law regulating cannabis was enacted, resulted in broad restrictions on all varieties of the plant.¹⁰ In this Comment, I instead examine the authority of the Drug Enforcement Administration (DEA) to regulate hemp under the Controlled Substances Act of 1970¹¹ (CSA). I argue that in reviewing applications from prospective hemp growers, the DEA has failed to apply or has improperly applied the balancing test that the CSA dictates it must when regulating any controlled substance, and that agency interpretations of both the Marihuana Tax Act of 1937¹² (MTA) and the CSA run counter to the intentions of the U.S. Congress. The CSA's balancing test requires the attorney general to weigh six factors when determining whether granting a license to a prospective manufacturer of a controlled substance is in the public interest.¹³ Whereas prospective hemp growers have unsuccessfully argued that hemp is not marijuana and thus cannot be regulated under the CSA,¹⁴ no court has actually considered whether, in light of the CSA's balancing test, the DEA can legitimately deny or delay licenses to cultivate industrial hemp. I argue that it cannot, particularly when states have adopted regulatory schemes like the one enacted in North Dakota. I

9. See *infra* notes 92–93 and accompanying text.

10. See Christen D. Shepherd, *Lethal Concentration of Power: How the D.E.A. Acts Improperly to Prohibit the Growth of Industrial Hemp*, 68 UMKC L. REV. 239, 249–52 (1999) (describing how William Randolph Hearst's sensationalized vilification of marijuana "would eventually overshadow and kill the growth of the industrial hemp industry" and how ignorance of the role that THC played in the psychotropic properties of marijuana and technological limitations on testing THC levels in cannabis plants resulted in restrictions that made hemp cultivation "prohibitively time-intensive"); see also Susan David Dwyer, *The Hemp Controversy: Can Industrial Hemp Save Kentucky?*, 86 KY. L.J. 1143, 1162 (1998) (explaining how "[i]ndustrial hemp was seen as an obstacle to the demonizing of marijuana and enforcement of drug laws"). Dwyer also discusses how the flax industry capitalized on the marijuana connection in lobbying efforts that contributed to hemp's demise. She describes a press release from the Flax institute of America that "decree[d] the hemp industry as a cover for a 'dope conspiracy' supported by the New Deal Government." Dwyer, *supra* at 1159 (citing Press Release, Flax & Fibre Inst. of Am., This Is an Example of Cradle to Grave Planning to the End Result (Mar. 30, 1943), reprinted in David P. West, *Fiber Wars: The Extinction of Kentucky Hemp*, in HEMP TODAY 5, 37–38 (Ed Rosenthal ed., 1994)).

11. Pub. L. No. 91-513, 84 Stat. 1236 (1970) (codified as amended at 21 U.S.C. § 801 (2006)).

12. Marihuana Tax Act of 1937, ch. 553, 50 Stat. 551 (repealed 1970).

13. The DEA is directed to consider: (1) prevention of diversion; (2) consistency with state and local law; (3) effects of registration on technical advancement; (4) criminal history; (5) past experience and "the establishment of effective control against diversion"; and (6) other public health and safety factors. 21 U.S.C. § 823(a) (2006).

14. See *infra* note 94 and accompanying text.

focus on North Dakota because it has enacted a robust regulatory scheme to facilitate hemp cultivation.¹⁵ However, the analysis would apply in any jurisdiction that adopts a similar regulatory framework.

In Part I, I provide a general description of industrial hemp and its history in the United States and outline the wide variety of industries currently using hemp in Europe, Asia, and Canada. I also examine the potential for further industrial innovation. In Part II, I briefly explain hemp's legal history, current status, and the federal registration requirements for prospective growers. In Part III, I explicate the federal registration requirements of the Controlled Substances Act outlined in 21 U.S.C. § 823(a), and illustrate that the statute's six factors compel the DEA to grant permits to farmers licensed under North Dakota law. I also argue that denying such applications is contrary to legislative intent. In Part IV, I describe the recourse available to applicants under the Administrative Procedure Act¹⁶ (APA) when the DEA delays or denies applications. I conclude that courts may be more receptive to claims that the DEA has failed to fulfill its obligations under Section 823(a) than they have been to arguments that hemp should not be regulated under the CSA. Whereas the latter course has repeatedly proved unsuccessful, the former has not yet been pursued, and seems highly promising.

I. INDUSTRIAL HEMP CHARACTERISTICS AND USES

Industrial hemp is a genetically distinct variety of *Cannabis sativa* L. characterized by its low level of the psychoactive chemical tetrahydrocannabinol (THC).¹⁷ Whereas the drug marijuana contains 3 to 15 percent THC in its flowers, the flowering upper portions of Canadian and European hemp plants contain less than three-tenths of 1 percent and two-tenths of 1 percent, respectively.¹⁸

From the colonial period through the middle of the nineteenth century, hemp was widely grown in the United States for use in fabric, twine, and paper.¹⁹ Production dropped by the 1890's as technological advances made cotton a more competitive textile crop, and coarse fiber crops were increasingly

15. See *infra* note 93.

16. Administrative Procedure Act, ch. 324, 60 Stat. 237 (1946) (codified as amended in scattered sections of 5 U.S.C.).

17. See Affidavit of Burton L. Johnson at para. 3, *Monson v. DEA*, 522 F. Supp. 2d 1188 (D. N.D. 2007) (No. 4:07-cv-00042), 2007 WL 2893430 [hereinafter Johnson Affidavit].

18. *Id.* Despite their genetic distinctions and differing THC contents, the DEA does not distinguish between hemp and marijuana when enforcing drug control laws. See *infra* note 188 and accompanying text.

19. RAWSON, *supra* note 7, at 1.

imported.²⁰ Nonetheless, American farmers continued to grow hemp into the middle of the twentieth century, finding it a useful rotation crop because it acted as a natural herbicide²¹—a dense, rapidly growing crop, it choked out weeds prior to the next planting of corn and other crops.²² At the urging of the government, production to supply fiber for military purposes was expanded enormously during World War I and again during World War II, particularly after the Japanese cut off exports from the Philippines.²³

Hemp is currently cultivated in more than thirty countries, including China, France, Germany, Hungary, and Russia,²⁴ and continues to be used in traditional fashion. It is grown for textile purposes in Europe.²⁵ Its tensile strength of up to 80,000 pounds per square inch is twice that of cotton,²⁶ but, unlike cotton, it requires no chemical pesticides.²⁷ Hemp also continues to be grown for paper production.²⁸ Paper made from hemp lasts over two centuries, three times longer than paper made from wood, and it does not yellow as it ages.²⁹ Moreover, whereas tree wood requires the use of toxic, nonrecyclable sulfuric acid to break down lignin and chorine for bleaching, hemp pulp can be processed with a recyclable caustic soda.³⁰

Hemp seeds and hemp seed oil are increasingly popular ingredients in food and cosmetics. Food products range from hemp butters and oils to protein powders, power bars, breakfast cereals, pastas, tortilla chips, and beer.³¹ Hemp

20. *Id.* at 1–2.

21. *See Hemp and Marihuana: Hearing on H.R. 2348 Before the S. Comm. on Finance*, 79th Cong. 15 (1945) (statement of George E. Farrell, Agricultural Specialist, Bureau of Agriculture Economics, United States Department of Agriculture) [hereinafter *1945 Hearing*].

22. *See id.*

23. *See id.* at 2 (statement of Joseph P. O'Hara, Rep., Second Congressional District of Minnesota); *see also* Video: Hemp for Victory (United States Department of Agriculture 1942), available at http://www.archive.org/details/Hemp_for_victory_1942_FIXED (explaining that “Philippine and East Indian sources of hemp [were] in the hands of the Japanese”).

24. Johnson Affidavit, *supra* note 17, at para. 3.

25. Affidavit of T. Randall Fortenberry, Ph.D., at para. 11, *Monson v. DEA*, 522 F. Supp. 2d 1188 (D.N.D. 2007) (No. 4:07-cv-00042), 2007 WL 2893429 [hereinafter Fortenberry Affidavit].

26. ROBERT DEITCH, *HEMP—AMERICAN HISTORY REVISITED* 221 (2003) (citing II *ENCYCLOPEDIA AMERICANA* 168 (1956)).

27. *Id.* at 221–22 (noting that cotton accounts for half of all agricultural chemical pesticides used in the United States).

28. *See* Fortenberry Affidavit, *supra* note 25, at para. 11.

29. *See* DEITCH, *supra* note 26, at 219.

30. *Id.*

31. *See Canada's Industrial Hemp Industry*, AGRIC. & AGRI-FOOD CANADA, March 2007, <http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1174595656066&lang=e> (describing pastas, tortilla chips, and beer, among other food products); Peace Cereal, <http://www.peacecereal.com/Products/Products.aspx> (last visited Aug. 3, 2009); Rawganique, <http://www.rawganique.com/Food.htm> (last visited June 7, 2009) (describing hemp butters, oils, and protein powders); Vega Energy Bars, <http://>

seeds contain twenty percent high-quality digestible protein.³² Like fish oils, hemp oil is high in omega-3, a fatty acid that the United States Food and Drug Administration (FDA) has advised may help reduce coronary heart disease.³³ Because the FDA has recommended that consumers, particularly nursing mothers and children, limit their consumption of fish oil supplements due to environmental contaminants like mercury, hemp products have gained popularity over the past decade as consumers seek substitute sources of omega-3.³⁴ As for cosmetics, Canadian producers cite manufacturing of hemp-based body care products, including lotions, creams, lip balms, conditioners, soaps, and shaving products, as growing industries.³⁵

Innovations in industrial applications in producing countries are wide ranging and evolving. Hemp pulp is used to make lightweight boards, plastic reinforcements, and interior and exterior floor coverings in China.³⁶ Hemp boards can be used for furniture construction.³⁷ Canadian, German, and Japanese businesses are using it to reinforce the synthetic plastic Polylactide³⁸ to broaden its industrial applications.³⁹ Automotive companies including Volvo are moving towards hemp and other sustainable sources as alternatives to fiberglass and petroleum-based plastics.⁴⁰ Interior panels in an estimated three million vehicles in North America have been molded from a bio-composite material made from hemp fiber.⁴¹ In the spring of 2008, American and

sequelnaturals.com/en/vega/products/whole-food-energy-bar/features-benefits?gclid=CMSD9_vxjpoCFSRP
agodCg-1-w (last visited June 7, 2009).

32. Fortenberry Affidavit, *supra* note 25, at para. 8 (citing U.S. DEP'T. OF AGRIC., INDUSTRIAL HEMP IN THE UNITED STATES: STATUS AND MARKET POTENTIAL 15 (2000)).

33. *Id.*

34. *Id.*

35. Canada's Industrial Hemp Industry, *supra* note 31.

36. Fortenberry affidavit, *supra* note 25, at para. 11.

37. See DEITCH, *supra* note 26, at 220 (citing I.Y. Bentsianova, G.M. Veksler, L.R. Markov, S.N. Melamed & P.M. Petrienko, *The Manufacturing of Wood-particle Board From Hemp Soutch*, 11 DEREVOBRABAT. PROM. 1, 9–10 (1962)) (describing how the world's largest furniture plant was built in the Ukraine in the 1960's and was designed to use hemp as its principle raw material); see also Fortenberry Affidavit, *supra* note 25, at para. 11 (explaining that the Swedish icon IKEA has "shown interest" in using hemp for furniture).

38. Polylactide is a "biodegradable thermoplastic derived from lactic acid." Design inSite, <http://www.designinsite.dk/htmsider/m0956.htm> (last visited July 11, 2009).

39. Fortenberry Affidavit, *supra* note 25, at para. 11.

40. *Id.*; see also Volvo Car Corporation: Borrowing a Leaf From Nature to Deliver on Sustainable Mobility, <http://www.volvocars.com/intl/corporation/NewsEvents/News/Pages/default.aspx?item=19> (last visited Aug. 3, 2009).

41. Fortenberry Affidavit, *supra* note 25, at para. 9; see also DEITCH, *supra* note 26, at 223 (describing the car that Henry Ford built almost entirely from hemp—the body was made from a hemp-based molded plastic ten times stronger than steel and 1000 pounds lighter); Lotus Eco Elise Concept with Hemp Body Panels!, CARSCOOP (July 9, 2008), <http://carscoop.blogspot.com/2008/07/lotus-eco-elise-concept-with-hemp-body.html> (describing Lotus's introduction of its "green" roadster

British companies partnered to bring Hemcrete, a building system that combines hemp fiber with a lime binder for seamless wall construction and floor and roof insulation, to Texas for use in construction of a chapel and pottery studio.⁴² Hemcrete is about 50 percent lighter than concrete but up to seven times stronger, and is more elastic and thus less susceptible to cracking.⁴³ It is fireproof, waterproof, and rot and rodent resistant.⁴⁴ It also significantly reduces the carbon emissions produced by construction. Not only does hemp absorb large quantities of carbon dioxide as it grows,⁴⁵ but Hemcrete walls absorb carbon dioxide from the air and have been reported to store around 110 kilograms of carbon dioxide per cubic meter.⁴⁶ In contrast, some studies show that traditional buildings in the United Kingdom emit up to 200 kilograms of carbon dioxide for each square meter of house walling.⁴⁷

Also intriguing is a phytoremediation⁴⁸ study conducted in Germany suggesting that industrial hemp is an “ideal candidate as a profit yielding crop”⁴⁹ when used for absorption in soils contaminated with heavy metals. Hemp accumulates high concentrations of such metals in its leaves with relatively low levels in the hurds⁵⁰ and fibers.⁵¹ Whereas these levels would disqualify the hemp fibers for use in food or clothes production, the fibers could be used in composite materials, and the oil could still be utilized in lacquer or industrial oil production.⁵² The investigators further hypothesized

at the 2008 British Motor Show: Lotus’s “holistic approach to ecology”—focusing on the environmental impact of the entire vehicle rather than solely on tailpipe emissions—includes using hemp in the roadster’s composite body panels).

42. Press Release, eMediawire.com, Highly Sustainable British Hemcrete® Building System Makes Its Debut in the United States (Apr. 17, 2008), available at <http://www.prweb.com/pdfdownload/863494/pr.pdf>.

43. Natural-Environment.com, You say “Hemcrete,” I say “Hempcrete,” <http://www.natural-environment.com/blog/2008/02/01/you-say-hemcrete-i-say-hempcrete> (last visited June 7, 2009).

44. *Id.*

45. See *Canada’s Industrial Hemp Industry*, *supra* note 31 (stating that hemp “absorbs carbon dioxide five times more efficiently than the same acreage of forest and it matures in three to four months”); see also *infra* notes 163–166 and accompanying text.

46. Natural-Environment.com, *supra* note 43.

47. *Id.*

48. Phytoremediation is a process of decontaminating soil by using plants to absorb heavy metals and other contaminants; however, the harvested biomass may itself be classified as a hazardous waste product. See BioBasics, <http://www.biobasics.gc.ca/english/View.asp?x=742> (last visited June 7, 2009).

49. P. Linger, J. Müssig, H. Fischer & J. Kobert, *Industrial Hemp (Cannabis sativa L.) Growing on Heavy Metal Contaminated Soil: Fibre Quality and Phytoremediation Potential*, 16 *INDUS. CROPS & PRODUCTS* 33, 40 (2002).

50. Hurds are a cellulose-rich material, similar to wood pulp, found in the center of a hemp stalk. See Mari Kane, *Hemp 101*, http://www.hemptraders.com/properties_of_hemp_hemp101.php (last visited July 11, 2009).

51. Linger et al., *supra* note 49, at 39.

52. *Id.* at 40.

that industrial hemp grown for phytoremediation could later be used for energy production in thermal power stations, as the fiber contamination levels fall within the range approved for this purpose.⁵³ They highlighted that hemp can be successfully grown under natural conditions, requiring neither “the expensive use of fertilisers nor the time- and money-consuming control of optimal growth conditions.”⁵⁴ Researchers conducting a phytoremediation study in Hawaii also found that industrial hemp has a very high tolerance for chrysene and benzo[a]pyrene, hydrocarbons present in many industrial sites and in harbor sediments.⁵⁵ As it grows very quickly in locations like Hawaii,⁵⁶ hemp is a strong candidate for remediation in tropical areas contaminated with hydrocarbons.⁵⁷

Hemp also holds significant potential for production of biofuels. Twenty gallons of methanol can be produced per acre of industrial hemp—ten times as many as from an acre of corn stalks.⁵⁸ And, as cellulose ethanol technology advances, industrial hemp holds great promise because of its high biomass cellulose content.⁵⁹ Moreover, because of its heartiness and adaptability to a wide variety of climates and growing conditions,⁶⁰ hemp is cited as a crop that could yield biofuels without competing with food crops for water or land.⁶¹

Retail sales of imported hemp products exceeded \$70 million in the United States in 2006.⁶² Given hemp’s wide-ranging utility, supporters of domestic cultivation estimate that it would create a \$300 million dollar industry.⁶³ However, its legal status, as interpreted by the DEA, has thwarted the attempts of farmers to grow hemp domestically.

53. *Id.*

54. *Id.*

55. Sonia Campbell et al., *Remediation of Benzo[a]pyrene and Chrysene-Contaminated Soil With Industrial Hemp (Cannabis sativa)*, 4 INT’L J. OF PHYTOREMEDIATION 157, 158 (2002).

56. See *infra* note 126 and accompanying text.

57. Campbell et al., *supra* note 55, at 165.

58. DEITCH, *supra* note 26, at 222.

59. See Ray Ryan, *Gesco Network to Pioneer Biomass Field Trials of Hemp*, IRISH EXAMINER, Sept. 4, 2008, available at <http://www.examiner.ie/story/business/qlkfeyojmh/rss2/> (reporting that “Gesco said the industrial hemp crop has the ability to produce in excess of 17–20 tonnes of biomass per hectare”).

60. DEITCH, *supra* note 26, at 223 (explaining that hemp can be grown on terrain ranging from swamps to mountains, is good for land reclamation, aerates overworked soil, and prevents erosion and mud slides); see also *infra* note 254 (describing the Oglala Sioux’s success in growing hemp on arid reservation land in South Dakota where little else survives).

61. Adam Cox, *Want the Next Big Energy Source? Dig in the Weeds*, REUTERS, Aug. 20, 2007, <http://www.reuters.com/article/inDepthNews/idUSL2074541620070820>.

62. *Movement Under Way to Make Hemp Hip Again*, CANNAZINE, <http://cannazine.co.uk/hemp/hemp-products/movement-under-way-to-make-hemp-hip-again.html> (last visited Aug. 3, 2009).

63. *Id.*

II. LEGAL HISTORY AND CURRENT LEGAL STATUS

In 1937, Congress passed the Marihuana Tax Act (MTA), the first federal law enacted to discourage *Cannabis sativa* L. production for marijuana.⁶⁴ The MTA was designed to permit legitimate industrial and medical uses and taxed importers, manufacturers, producers, physicians, and other registered dealers at varying rates annually.⁶⁵ Registered hemp farmers were subject to a minimal tax of \$1 per year.⁶⁶ Under the MTA,

[t]he term “marihuana”⁶⁷ means all parts of the plant *Cannabis sativa* L., whether growing or not; the seeds thereof; the resin extracted from any part of such plant; and every compound, manufacture, salt, derivative, mixture, or preparation of such plant, its seeds, or resin; *but shall not include the mature stalks of such plant, fiber produced from such stalks, oil or cake made from the seeds of such plant, any other compound, manufacture, salt, derivative, mixture, or preparation of such mature stalks (except the resin extracted therefrom), fiber, oil, or cake, or the sterilized seed of such plant which is incapable of germination.*⁶⁸

Because the parts of the hemp plant commonly used in industrial applications (the fiber, oil, and seeds) were exempted from the definition of marijuana entirely, no taxation or registration requirement was to be applied to millers or other businesspeople who obtained stalks, seeds, and other derivatives from producers. This exemption was adopted verbatim when the Controlled Substances Act of 1970⁶⁹ (CSA) was enacted, displacing the MTA. Currently, importers of hemp and hemp products are exempt from the CSA.⁷⁰

64. RAWSON, *supra* note 7, at 2.

65. See Marihuana Tax Act of 1937 § 2(a), ch. 553, 50 Stat. 551, 552 (repealed 1970).

66. *Id.* § 2(a)(2).

67. “Marihuana” is used in the older statutes; “marijuana” more recently. RAWSON, *supra* note 7, at 1 n.1. “Marijuana” is used in this Comment, except in citations to other sources.

68. Marihuana Tax Act of 1937 § 1(b), ch. 553, 50 Stat. 551, 551 (emphasis added).

69. Comprehensive Drug Abuse Prevention and Control Act of 1970, Pub L. No. 91-513, 84 Stat. 1236 (codified as amended in scattered sections of 21 U.S.C.).

70. In 2001, the DEA published an interpretive rule classifying any product containing any amount of THC as a schedule I controlled substance “even if such product is made from portions of the cannabis plant that are excluded from the CSA definition of marihuana.” See Interpretation of Listing of “Tetrahydrocannabinols” in Schedule I, 66 Fed. Reg. 51,530, 51,533 (Oct. 9, 2001). The rule would thus have made the importation of hemp and hemp products without authorization by the DEA illegal. However, the Ninth Circuit struck the rule down in *Hemp Indus. Ass’n v. DEA*, 357 F.3d 1012, 1018 (9th Cir. 2004), on the grounds that it contravened the unambiguously expressed intent of Congress. The court held that the DEA failed to follow the formal rulemaking procedures required by 21 U.S.C. 811(a) to schedule a new substance and failed to evaluate the products’ potential for abuse as required by 21 U.S.C. 812. *Id.* The court also found that hemp products with a low THC content do not fall within the definition of marijuana under 21 U.S.C. 802(16). *Id.* at 1017. Rejecting the DEA’s claim that it was merely clarifying existing law, the court held that

The CSA provides criteria and a procedural framework for the classification of controlled substances⁷¹ and creates criminal liability for violation of its provisions.⁷² The Act defines the substances controlled,⁷³ establishes five schedules⁷⁴ for classifying substances depending on their potential for abuse,⁷⁵ and creates a procedure for adding new substances and for transferring substances between schedules.⁷⁶ The Act also authorizes the attorney general to promulgate rules and regulations related to the registration and control of the manufacture, distribution, and dispensing of controlled substances,⁷⁷ requires manufacturers and distributors of controlled substances to annually register with the attorney general in accordance with such rules and regulations,⁷⁸ and lists the factors that the attorney general must weigh when reviewing registration applications⁷⁹ and when denying, revoking, or suspending registration.⁸⁰ It requires the attorney general to determine production quotas for Schedule I⁸¹ and II⁸² substances “to provide for the estimated medical, scientific, research and industrial needs” of the country, for export, and for “maintenance of reserve stocks.”⁸³

Under the CSA, hemp, as a species of *Cannabis sativa* L., is a Schedule I⁸⁴ controlled substance.⁸⁵ Thus, the CSA does not make growing hemp illegal;

the statutes were unambiguous, and thus no *Chevron* deference was required. *Id.* at 1016–17. Citing the exemptions from the definition of marijuana in 21 U.S.C. 802(16), the court explained: “Congress knew what it was doing and its intent to exclude non-psychoactive hemp from regulation is entirely clear.” *Id.* at 1018.

71. See 21 U.S.C. § 801a(3) (2006).

72. See *id.* §§ 825, 828.

73. See *id.* § 802.

74. Schedule I substances are those with the highest abuse potential and no medical use, and Schedule V substances are those with lowest abuse potential. See *id.* § 812(b)(1)(A),(b)(5)(A).

75. See *id.* § 812(b).

76. See *id.* § 811.

77. See *id.* § 821.

78. See *id.* § 822(a).

79. See *id.* § 823.

80. See *id.* § 824.

81. Schedule I substances are those with a “high potential for abuse,” with “no currently accepted medical use in treatment in the United States,” and with a lack of safety for use under medical supervision. *Id.* § 812(b)(1).

82. Schedule II substances are those with a “high potential for abuse,” a “currently accepted medical use in treatment in the United States,” and the potential for abuse to “lead to severe psychological or physical dependence.” *Id.* § 812(b)(2).

83. See *id.* § 826(a).

84. See *id.* § 812(c) (Schedule I (c)(10), (17)); see also *id.* § 802(16) (defining marijuana to include “all parts of the plant *Cannabis sativa* L.” except certain parts of the plant including mature stalks, fiber produced from the stalks, sterilized seeds, oil from the seeds, and certain other derivatives).

85. On April 2, 2009, Representative Ron Paul introduced the Industrial Hemp Farming Act of 2009. H.R. 1866, 111th Cong. (2009). The bill explicitly states that marijuana does not include industrial hemp and, if enacted, would permit hemp production under state law without preemption

rather it requires prospective growers to obtain registration from the DEA.⁸⁶ But, in practice, the DEA unilaterally rejects almost all such applications.⁸⁷ It only issued one annual permit for a research plot in Hawaii intermittently between 1999 and 2003,⁸⁸ and one for a research plot at North Dakota State University (NDSU) in November of 2007. However, the requirements the DEA placed on NDSU make planting the crop extremely expensive.⁸⁹ Thus, all hemp products currently sold in the United States are either themselves imported or manufactured from imported hemp.⁹⁰

Meanwhile, twenty-eight states have considered some type of legislation liberalizing their laws regarding industrial hemp; fifteen have enacted such legislation, and eight of those “have removed barriers to its production or research.”⁹¹ In 1999, North Dakota became the first state to authorize and create a licensing scheme for industrial hemp production.⁹² The state legislature enacted numerous safeguards ensuring that licensees would grow in their

by the federal government. *See id.* §§ 2–3. Paul had previously introduced similar legislation in 2005. *See* Industrial Hemp Farming Act of 2005, H.R. 3037, 109th Cong. (2005).

86. H.R. 3037.

87. *See* Controlled Substances: 2000 Aggregate Production Quota, 65 Fed. Reg. 56,328, 56,329 (Sept. 18, 2000) (explaining that because there had been no DEA registrants licensed to manufacture hemp, the DEA “had not previously established an aggregate production quota for marijuana greater than zero.”). As discussed in Part III.B, despite their differing THC contents, the DEA does not distinguish between hemp and marijuana. *See infra* note 188 and accompanying text.

88. Telephone Interview With David West, Principal Investigator at the Alterna Hemp Research Project (Feb. 20, 2008) (notes on file with author).

89. North Dakota State University (NDSU) may plant up to two acres for research, but the plot must have 24-hour security, a 10-foot high razor fence, and high-powered illumination; costs to meet the DEA requirements are estimated at \$50,000. *Sue Roesler, NDSU Moves Toward Starting Industrial Hemp Research in 2008*, FARM & RANCH GUIDE, Dec. 21, 2007, at 27, available at http://www.farmandranchguide.com/articles/2007/12/20/ag_news/regional_news/regional10.txt. Similar requirements (except for the 24-hour security) were placed on David West’s research plot in Hawaii: the security for his quarter-acre plot cost \$5,000 to install and another \$3,000 annually. *See* West Affidavit, *supra* note 2, at para. 26.

90. RAWSON, *supra* note 7, at 3.

91. Vote Hemp, *supra* note 8 (providing links to legislation passed in Hawaii, Kentucky, Maine, Maryland, Montana, North Dakota, Vermont and West Virginia). Aside from Montana, each of these states’ own drug control laws contain provisions similar to the federal definition of marijuana as provided *supra* note 68 and accompanying text. *See* HAW. REV. STAT. ANN. § 329-1 (LexisNexis 2008); KY. REV. STAT. ANN. § 218A.010(18) (LexisNexis 2008); ME. REV. STAT. ANN. tit 17-A, § 1101 (1) (2009); MD. CODE ANN., CRIM. LAW § 5-101(q)(1) (LexisNexis 2008); N.D. CENT. CODE § 19-03.1-01 (2008); VT. STAT. ANN. tit. 18, § 4201(15) (2008); W. VA. CODE ANN. § 60A-1-101(o) (LexisNexis 2008). Montana defines marijuana as “all plant material from the genus *cannabis* containing tetrahydrocannabinol (THC) or seeds of the genus capable of germination.” MONT. CODE ANN. § 50-32-101(17) (2007).

92. *See* N.D. CENT. CODE §§ 4-42-01, 4-42-02, 4-42-03 (2008); *see also* RAWSON, *supra* note 7, at 3 (stating that under its 1999 law, “North Dakota became the first state to authorize industrial hemp production within its borders”).

fields only hemp certified to have low-THC content.⁹³ However, because North Dakota farmers face federal criminal prosecution if they plant industrial hemp without a license from the DEA,⁹⁴ none have benefited from their state licenses. Parties in North Dakota and other states have challenged the DEA's authority to regulate hemp production, arguing that it is not marijuana and thus not subject to regulation under the CSA; at present, they have been uniformly unsuccessful.⁹⁵

III. APPLICANT REGISTRATION: HEMP IN NORTH DAKOTA

Because North Dakota has enacted strict licensing rules governing cultivation of hemp and ensuring the crop's low-THC content,⁹⁶ analyzing the denial of federal registration to North Dakota applicants illustrates how the DEA's hemp policy contravenes its obligations under the CSA. Specifically, the DEA's reflexive denial of federal registration likely violates 21 U.S.C. § 823(a), which explicitly states: "The Attorney General *shall* register an applicant to manufacture controlled substances in schedule I or II if he

93. Among others, the following safeguards have been enacted: applicants and all individuals who will be involved with producing industrial hemp crops must submit to criminal background checks, N.D. ADMIN. CODE 7-14-02-02(1)(c),(d) (2007); anyone with a prior criminal conviction may not be licensed, N.D. CENT. CODE § 4-41-02(1) (2008); applicants "must provide to the commissioner field locations using geopositioning capability instrumentation along with an official aerial United States department of agriculture farm service agency map or any other method approved by the commissioner," N.D. ADMIN. CODE 7-14-02-02(1)(e); licenses must be renewed yearly, *id.* at 7-14-02-02(2); all seed must be certified, *id.* at 7-14-02-09(3); all seed "must be covered during transport to avoid . . . inadvertent dissemination," *id.* at 7-14-02-04(1)(b); licensees must allow enforcement officials to enter their fields at any time to test their crops, and must make their fields readily accessible for monitoring and testing, *id.* at 7-14-02-07(1); licensees must certify the acreage planted and file documentation stating that the plant variety was certified to contain no more than 0.3 percent THC, *id.* at 7-14-02-05(1)(a),(b); before harvesting their crops, licensees must receive approval from the commissioner, *id.* at 7-14-02-07(2); and the commissioner can destroy any crops or byproducts if produced in a manner inconsistent with the regulations, *id.* at 7-14-02-08(2) (2008).

94. See *Monson v. DEA*, 522 F. Supp. 2d 1188, 1202 (D.N.D. 2007); Brief of Amicus Curiae North Dakota State University in Support of Plaintiffs' Cross-Motion for Summary Judgment and in Opposition to Defendants' Motion to Dismiss at 3, *Monson v. DEA*, 522 F. Supp. 2d 1188 (D.N.D. 2007) (No. 4:07-cv-00042), 2007 WL 3284276 [hereinafter NDSU Brief].

95. See *United States v. White Plume*, 447 F.3d 1067, 1072 (8th Cir. 2006) (concluding that the Controlled Substances Act (CSA) adopted a broad criminal ban that "embraces production of cannabis sativa plants regardless of use" (quoting *N.H. Hemp Council, Inc. v. Marshall*, 203 F.3d 1, 7 (1st Cir. 2000))); *N.H. Hemp Council, Inc.*, 203 F.3d at 7–8 (embracing a literal reading of the CSA rather than a construction of legislative history that suggests Congress did not intend to regulate industrial hemp as marijuana); *Monson*, F. Supp. 2d at 1198 (holding that "'marijuana' unambiguously includes *Cannabis sativa* L. plant and does not in any manner differentiate between *Cannabis* plants based on their THC concentrations").

96. See *supra* note 93.

determines that such registration is consistent with the public interest”⁹⁷
The statute goes on to list the six factors that the attorney general “shall” consider in determining the public interest:

- (1) maintenance of effective controls against diversion of particular controlled substances and any controlled substance in schedule I or II compounded therefrom into other than legitimate medical, scientific, research, or industrial channels, by limiting the importation and bulk manufacture of such controlled substances to a number of establishments which can produce an adequate and uninterrupted supply of these substances under adequately competitive conditions for legitimate medical, scientific, research, and industrial purposes;
- (2) compliance with applicable State and local law;
- (3) promotion of technical advances in the art of manufacturing these substances and the development of new substances;
- (4) prior conviction record of applicant under Federal and State laws relating to the manufacture, distribution, or dispensing of such substances;
- (5) past experience in the manufacture of controlled substances, and the existence in the establishment of effective control against diversion; and
- (6) such other factors as may be relevant to and consistent with the public health and safety.⁹⁸

Existing data regarding the economic potential for the hemp industry within North Dakota, in the context of the rigorous regulatory scheme established by the state legislature to promote cultivation, provide a practical illustration of how each of these six factors should be evaluated. Consideration of these factors leads to the conclusion that federal registration for North Dakota licensees is consistent with the public interest. This is particularly true in light of the legislative history surrounding the regulation of hemp.

A. Industrial Hemp Meets All Six Factors Under Section 823(a)

1. Prevention of Diversion

The first factor requires the attorney general to evaluate the effects of registration on diversion of the substance to illicit purposes by examining the controls maintained against diversion from legitimate uses and by limiting the number of importers and producers.⁹⁹

The DEA’s primary argument against hemp cultivation relates to this factor. The agency claims that permitting industrial hemp farming would

97. 21 U.S.C. § 823(a) (2006) (emphasis added).

98. *Id.*

99. *Id.* § 823(a)(1).

intensify covert production of marijuana and complicate the DEA's enforcement activities because marijuana laws are enforced "through visual and aerial surveillance."¹⁰⁰ It argues that drug enforcement officials would not be able to distinguish hemp fields from marijuana fields,¹⁰¹ and that farmers could conceal marijuana plants among their hemp crops.¹⁰² In the case of North Dakota licensees, the DEA's argument is unconvincing.

In order to obtain a license from the state of North Dakota, farmers are required to use "geopositioning capability instrumentation" to provide the state government with a Department of Agriculture map illustrating exactly where they intend to grow industrial hemp.¹⁰³ The farmers also must certify the final acreage planted, provide documentation of the hemp variety's low-THC level, and make their fields accessible to state inspectors for monitoring and testing.¹⁰⁴ These requirements therefore prevent the existence of the farmers' fields from jeopardizing the effectiveness of the DEA's aerial surveillance of marijuana fields because the DEA could simply refer to a Department of Agriculture map when conducting its surveillance to ascertain that a particular field contains industrial hemp rather than marijuana.

Moreover, it is extremely unlikely that marijuana plants could be concealed in an industrial hemp field. Hemp growers plant seeds very close together to create straight, tall plants with long fibers, whereas marijuana growers plant seeds at wide intervals to create bushy plants with lots of branches with flower-producing ends.¹⁰⁵ Additionally, hemp is harvested five to six weeks before marijuana,¹⁰⁶ and cross-pollination between the plants would significantly lower the THC content in the marijuana plants.¹⁰⁷

In fact, contrary to the DEA's contentions, permitting hemp farming could actually deter illegal marijuana production. An experiment conducted in Russia showed that hemp pollen can travel up to twelve kilometers;¹⁰⁸ a

100. See RAWSON, *supra* note 7, at 8; *Movement Under Way to Make Hemp Hip Again*, *supra* note 62 (quoting narcotics officer John Lovell).

101. See *N.H. Hemp Council*, 203 F.3d at 6.

102. *Movement Under Way to Make Hemp Hip Again*, *supra* note 62.

103. See N.D. ADMIN. CODE 7-14-02-02(1)(e) (2007).

104. See *id.* §§ 7-14-02-05(1)(a), (b), 7-14-02-07(1).

105. Jared B. Kahn, *Hemp . . . Why Not?* 14 n.59 (Bepress Legal Series, Working Paper No. 1930, 2007), available at <http://law.bepress.com/expresso/eps/1930> (citing JOHN W. ROULAC, HEMPTECH, HEMP HORIZONS: THE COMEBACK OF THE WORLD'S MOST PROMISING PLANT 66 (1997)); see also West Affidavit, *supra* note 2, at para. 21 ("Marijuana is a horticultural crop planted in wide spacing to minimize stand competition and promote flower production. It branches thickly like a Christmas tree. In contrast, hemp selected for long fiber has only a few branches.").

106. ROULAC, *supra* note 105, at 66.

107. See West Affidavit, *supra* note 2, at para. 58.

108. See *id.* at para. 23.

marijuana grower who established an illegal field within a twelve-kilometer radius of a legal industrial hemp field would thus jeopardize the potency of his crop.¹⁰⁹ The DEA's concern may stem from the fact that some marijuana growers do currently hide hemp in cornfields, but this is because corn creates no similar cross-pollination problems.¹¹⁰ Of course, the DEA has no authority to regulate the cultivation of corn.

Although the DEA's application of the 21 U.S.C. 823(a) factors to requests for registration by hemp farmers has not been litigated, the rulings of courts considering the DEA's classification of hemp as a controlled substance reveal their inclination to defer to the judgment of the DEA with respect to its diversion concerns. In *New Hampshire Hemp Council, Inc. v. Marshall*,¹¹¹ the First Circuit rejected claims by a farmer and an organization supporting the legalization of hemp cultivation that industrial hemp plants were not marijuana for the purposes of federal criminal statutes. The court cited expert testimony that when cannabis plants are very young, it is virtually impossible to differentiate high and low THC varieties, stating that "problems of detection and enforcement easily justify a ban broader than the psychoactive variety of the plant."¹¹² The North Dakota District Court in *Monson v. DEA*,¹¹³ also considering whether the CSA applies to the cultivation of hemp, relied on similar arguments, stating that chemical analysis was the only way by which the plants can be distinguished.¹¹⁴ However, such arguments fail to consider that under North Dakota law, the commissioner of agriculture was required to adopt regulations for testing plants during growth and for strictly supervising harvests,¹¹⁵ an issue never discussed by the *Monson* court. There would be no need for the DEA to test the plants when they are on a licensee's property because of the rigid regulatory scheme ensuring that the hemp's THC content is 0.3 percent or lower. Furthermore, under North Dakota law, hemp growers may only sell or transfer parts of the cannabis plant that are exempted by the CSA¹¹⁶ to anyone other than a DEA-registered processor.¹¹⁷ Therefore,

109. See *id.*

110. See *Movement Under Way to Make Hemp Hip Again*, *supra* note 62.

111. 203 F.3d 1 (1st Cir. 2000).

112. *Id.* at 6.

113. 522 F. Supp. 2d 1188 (D.N.D. 2007).

114. *Id.* at 1201.

115. See N.D. CENT. CODE § 4-41-02(3) (2008).

116. See 21 U.S.C. § 802(16) (2006) ("[M]arihuana' . . . does not include the mature stalks of such plant, fiber produced from such stalks, oil or cake made from the seeds of such plant . . . or the sterilized seed of such plant which is incapable of germination.").

117. See N.D. ADMIN. CODE 7-14-02-04(1)(d) (2007).

no part of the cannabis plant other than those explicitly permitted under federal law may ever leave a farmer's property.

The DEA argues that "Congress expressly commanded the United States Department of Justice to take the lead in controlling licit and illicit drug activity through the enforcement of the CSA" and that turning over this responsibility to any state "would be directly at odds with the Act."¹¹⁸ However, North Dakota's legislature created "effective controls against diversion" when it enacted laws ensuring that its licensees are only growing certified hemp with a THC content of 0.3 percent or lower; the state knows exactly where and how much hemp is being grown; maps are available detailing such information; and no part of the plant that is illegal under the CSA may ever leave the licensee's property.¹¹⁹ Nothing in Section 823(a)(1) precludes the DEA from considering state laws that protect against "diversion" when weighing whether granting a license is consistent with the public interest.

Further, Section 823(a)(1) states that effective controls are to be maintained "by limiting the importation *and* bulk manufacture . . . to a number of establishments . . . which can produce an adequate and uninterrupted supply . . . for legitimate . . . industrial purposes."¹²⁰ The phrase "importation *and* bulk manufacture," as opposed to "importation *or* bulk manufacture," reveals that for those Schedule I substances for which there are legitimate industrial purposes, the legislature intended that some manufacturing would occur domestically. The safeguards¹²¹ that North Dakota has put in place make it an ideal location for such production. Thus, despite DEA arguments to the contrary, the first of the evaluations required under Section 823(a) actually weighs heavily in favor of granting federal permits to North Dakota licensees.

2. Consistency With State and Local Law

The second factor requires the attorney general to evaluate whether federal registration would be "[in] compliance with applicable State and local law."¹²²

The North Dakota legislature not only created a licensing scheme to promote hemp cultivation, but on December 26, 2006, the State commissioner of agriculture asked the DEA to waive the federal registration requirement for

118. *Monson*, 522 F. Supp. 2d at 1193 (quoting Letter From Joseph T. Rannazzisi, DEA, to Roger Johnson, N.D. Agric. Comm'r (Feb. 1, 2007)).

119. *See supra* note 93.

120. 21 U.S.C. § 823(a)(1) (2006) (emphasis added).

121. *See supra* note 93.

122. 21 U.S.C. § 823(a)(2).

farmers licensed to grow hemp under state law.¹²³ Therefore, granting federal registration is not only in compliance with applicable State law, but it is North Dakota's express intention to eliminate barriers to hemp production for industrial purposes. Thus, the second factor undisputedly weighs in favor of registration.

3. Effects of Registration on Technical Advancement

The third factor requires the attorney general to consider whether registration would result in the "promotion of technical advances in the art of manufacturing these substances and the development of new substances."¹²⁴

According to David West, the plant breeder and geneticist who led the hemp research program in Hawaii between 1999 and 2003, hemp has been out of production in the United States for half a century, during which time the DEA eradicated the strongest domestically grown strains. Consequently, extensive research is required in order to breed new varieties.¹²⁵ West successfully used germplasm from China and Japan to alter European seeds and created a hemp variety that thrived in Hawaii, growing to heights of ten feet in three months.¹²⁶ The DEA's policies, however, have obstructed further domestic research. Due to agency delay, the last annual permit that West received from the DEA expired one month after it arrived in April 2003.¹²⁷ West explained that he was tired of the DEA's bureaucracy and had accomplished his goal: to breed a tropical variety of hemp. Thus, he discontinued his research. The DEA required him to destroy all of the seeds that he had created.¹²⁸

In 1999, the North Dakota legislature enacted a law mandating North Dakota State University (NDSU) to research industrial hemp for production within the state.¹²⁹ However, the DEA did not act on the university's application for federal registration, submitted on September 28, 1999,¹³⁰ until

123. *Monson*, 522 F. Supp. 2d at 1192.

124. 21 U.S.C. § 823(a)(3).

125. Telephone Interview With David West, *supra* note 88.

126. *Id.* West explained that European hemp is a temperate variety crop adapted to 45-degree latitude that shifts into reproductive mode too early due to the long nights in tropical Hawaii, which is located south of 20 degrees latitude. *Id.*

127. *Id.*

128. *Id.*

129. See N.D. CENT. CODE § 4-05.1-05 (2008); see also Roesler, *supra* note 89, at 28 (quoting North Dakota State Representative Dave Monson regarding the legislature's plan: NDSU was to begin research with Canadian seeds and cross them with genetic material from feral ditch weed—remnants of the hemp grown during World War II).

130. See *Monson v. DEA*, 522 F. Supp. 2d 1188, 1197 (D.N.D. 2007).

November 2007, after a federal judge admonished the agency for its then over eight years of inaction.¹³¹ When it finally did act, the DEA placed restrictions on NDSU that would entail about \$50,000 in security expenditures, requiring the university to seek additional funding.¹³²

In contrast, researchers in hemp-producing countries are making advancements in the crop itself, in product development and in processing methods. French breeders have produced a hemp variety called Santhica, which is THC-free.¹³³ Developments made by researchers funded by the Italian Ministry of Agriculture will facilitate breeding varieties with specific characteristics such as “increased seed and seed oil yield, modified seed oil fatty acid profiles [and] . . . resistance to specific pest [sic] and diseases.”¹³⁴ Although the hemp industry in Canada is just over a decade old, experts at a Canadian hemp trade conference presented information about breeding programs examining “fertilization and fertility rates, fiber research and product development.”¹³⁵ One new product resulting from this research is a nutrient-rich hemp milk; because hemp does not contain absorption-blocking inhibitors, protein in the milk can be easily digested.¹³⁶ Meanwhile, a company in Vancouver has developed a processing method that produces three grades of fiber from hemp stalks, each used for a different industrial purpose.¹³⁷

Therefore, whereas the art of manufacturing industrial hemp has progressed to the public’s benefit outside the United States, the DEA’s policies have blocked comparable development: Technical advances cannot be promoted domestically unless the DEA grants federal licenses. The innovations made in other countries, coupled with West’s study illustrating the advances that are possible in the United States, compel the conclusion that the third factor weighs in favor of licensing hemp growers.

131. See *id.*; see also Roesler, *supra* note 89, at 27 (explaining the court’s statement “[t]hat rebuff was part of a lawsuit judgment that went against two North Dakota farmers who wanted to grow industrial hemp”).

132. See Roesler, *supra* note 89, at 27–28 (also quoting Representative Monson explaining that the North Dakota legislature “talked (in Legislative sessions) about putting money in the budget (for hemp research), but since NDSU never received any notice from the DEA, we thought it was better used someplace else in the meantime”).

133. See Hempworld.com, Answer 3 Non-THC Hemp-seed, http://www.hempworld.com/hemp-cyberfarm_com/htms/hemp-seed/no_thc_h.html (last visited Aug. 10, 2009) (describing Santhica’s THC content of zero percent).

134. Paolo Ranalli, *Current Status and Future Scenarios of Hemp Breeding*, 140 EUPHYTICA 121, 124 (2004).

135. See Roesler, *supra* note 89, at 28.

136. *Id.*

137. See *id.* at 27 (“The first grade is for yarn, the second for sports body armor and long-lasting clothing, and the third is for industrial uses.”).

4. Criminal History

The fourth factor requires the attorney general to look at the “prior conviction record of [each] applicant under Federal and State laws relating to the manufacture, distribution, or dispensing of such [controlled] substances.”¹³⁸

Under North Dakota law, cultivators applying for state licenses must list all individuals who will be involved in any manner in handling or producing the crop, and the applicant and all such individuals must submit to state and national criminal-history background checks at the applicant’s expense.¹³⁹ These checks include both a statement declaring whether the applicant has ever been convicted of a crime, and fingerprinting by “a law enforcement agency or other local agency authorized to take fingerprints.”¹⁴⁰ Further, the agricultural commissioner must submit the fingerprints to the state’s bureau of criminal investigation for a nationwide criminal background check that includes resubmission to the Federal Bureau of Investigation. Because this investigation includes both state and federal criminal history checks and involves both state and federal agencies, a successful background check in North Dakota should satisfy the DEA.¹⁴¹ Applicants with a prior criminal conviction are denied state licenses.¹⁴² Thus, the fourth factor also weighs in favor of granting federal registration to North Dakota licensees.

5. Past Experience and Effective Controls Against Diversion

The fifth factor requires the attorney general to consider the applicant’s “past experience in the manufacture of controlled substances, and the existence in the establishment of effective control against diversion.”¹⁴³

Because the last hemp cultivators ceased production in the late 1950’s, there are currently no applicants who have any past experience with manufacturing hemp. But, the nation’s past experience in hemp cultivation, prior to the agency policies imposed during the past seventy years, illustrates that there is little danger of abuse. At a U.S. Senate Committee on Finance hearing in 1945, the Director of the Hemp Division at the Department of Agriculture testified that his division had received “no reports of anyone attempting to secure [hemp] leaves or blossoms” from government or privately

138. 21 U.S.C. § 823(a)(4) (2006).

139. See N.D. ADMIN. CODE 7-14-02-02(1)(c), (d) (2007).

140. See *id.* at 7-14-02-02(1)(d).

141. See N.D. CENT. CODE § 12-60-24(1)(c), (2)(b) (Supp. 2007).

142. See N.D. CENT. CODE § 4-41-02(1) (2008).

143. 21 U.S.C. § 823(a)(5).

owned hemp mills illicitly.¹⁴⁴ At the same hearing, a major Wisconsin hemp grower stated that “[i]n the 30 years we have operated and grown large acreages we have never heard of one instance where there was an illicit use made of the leaves of this hemp plant.”¹⁴⁵

Furthermore, the United States is the only developed nation that prohibits the cultivation of hemp.¹⁴⁶ It would seem that if a legal hemp industry truly resulted in “diversion”¹⁴⁷ into illegal channels, such problems would have arisen in the thirty countries in Europe, Asia, and North and South America currently growing hemp;¹⁴⁸ but diversion has not proven to be an issue.¹⁴⁹ David West has offered a hypothesis explaining why this may be the case: Countries that allow hemp cultivation operate under permit systems similar to the one enacted by the North Dakota legislature. Those who wish to engage in illegal activities, like marijuana production, would be unwise to do so in an area high on the “radar screen,” where inspectors may enter their fields without notice.¹⁵⁰ Thus, the fifth factor also weighs in favor of registration for North Dakota licensees.

6. Other Factors

The sixth factor requires the attorney general to consider “such other factors as may be relevant to and consistent with the public health and safety.”¹⁵¹

The DEA argues that permitting cultivation of industrial hemp would send “the wrong message to the American public concerning the government’s position on drugs.”¹⁵² It further claims that the true goal of those endeavoring to legalize industrial hemp is to decriminalize high-THC marijuana.¹⁵³ These

144. 1945 Hearing, *supra* note 21, at 12 (statement of Samuel H. McCrory, Director, Hemp Division, Commodity Credit Corporation, United States Department of Agriculture).

145. *Id.* at 6 (statement of Matt Rens, Matt Rens Hemp Co.).

146. See RAWSON, *supra* note 7, at 3, 4.

147. One question that courts may also consider is diversion of what? Because the hemp legalized for production in North Dakota, and in most developed nations, has a THC level under 0.3 percent, it has no value as an intoxicant. Telephone Interview With David West, *supra* note 88; see also N.D. ADMIN. CODE 7-14-02-05(1)(b) (2007); see generally RAWSON, *supra* note 7, at 1.

148. RAWSON, *supra* note 7, at 1 n.2 (citing Ernest Small & David Marcus, *Hemp: A New Crop With New Uses for North America*, in TRENDS FOR NEW CROPS AND NEW USES 284, 292 (Jules Janick & Anna Whipkey eds., 2002)).

149. See Kahn, *supra* note 105, at 14–15 (discussing German studies indicating that hemp growers are not concealing marijuana in their fields, and reports from the United Kingdom that “diversion from licit sources has been insignificant”; Britain’s largest grower reported only a single incident of theft). I have encountered no reports of diversion problems elsewhere.

150. See West Affidavit, *supra* note 2, at para. 59.

151. 21 U.S.C. § 823(a)(6) (2006).

152. RAWSON, *supra* note 7, at 8.

153. *Id.*

arguments are unpersuasive because hemp itself has no psychotropic properties, and are particularly unconvincing when compared to hemp's wide range of beneficial uses, as described in Part I.

Other recent developments further favor industrial hemp cultivation. Controversies regarding biofuels and proposals within the European Union to restrict imports to those produced in ecologically responsible ways highlight the need to distinguish between types of biofuels, including those produced from hemp.¹⁵⁴ More research is required to determine hemp's potential as an ecologically sound choice. However, because of its adaptability to land that may otherwise be unproductive and its rapid growth without herbicides, hemp may indeed be a viable, environmentally responsible, alternative fuel crop.¹⁵⁵ Indeed, it is already proving valuable as an alternative to plastic, another petroleum product.¹⁵⁶ As gasoline prices have exceeded four dollars per gallon in recent years,¹⁵⁷ and there is accord in the automobile industry that it is only a matter of time until gas prices once again soar,¹⁵⁸ pursuing hemp's potential is certainly in the public interest.

Even if one removes biofuels from the equation and considers more traditional uses, a 1996 study conducted by an Australian economist and British environmental policy scholars suggests that wide-scale cultivation of industrial hemp in the United States would yield a "double dividend."¹⁵⁹ According to this study, the ecological footprint¹⁶⁰ associated with producing textile fiber, oil seed, and paper from hemp, rather than from cotton and pulp logs, is reduced both in terms of direct land use and four of five¹⁶¹ environmental-damage indi-

154. James Kanter, *Amid Doubts, Europe May Ban Some Biofuels*, N.Y. TIMES, Jan. 15, 2008, at C1.

155. See *supra* note 60 and *infra* note 254.

156. Fortenberry Affidavit, *supra* note 25, at para. 10.

157. Clifford Krauss, *Rural U.S. Takes Worst Hit as Gas Tops \$4 Average*, N.Y. TIMES, June 9, 2008, at A1.

158. Warren Olney, *The Auto Industry: In Survival Mode* (KCRW radio broadcast Mar. 17, 2009), available at http://www.kcrw.com/news/programs/tp/tp090317the_auto_industry_in.

159. David M. Alden, John L.R. Proops & Philip W. Gay, *Industrial Hemp's Double Dividend: A Study for the USA*, 25 ECOLOGICAL ECON. 291, 298 (1998).

160. The study defines ecological footprint as "that land area required on a continuous basis to produce a flow of output and assimilate the accompanying waste, regardless of where that land may be located." *Id.* at 292.

161. The fifth factor, fertilizer use, would be increased rather than decreased. Because no fertilizer is required to grow pulp logs, fertilizer use is higher when hemp supplants wood for paper and pulp. *Id.* at 297. Websites promoting hemp cultivation report that hemp can be grown completely without fertilizers, see, e.g., Sproutpeople, <http://www.sproutpeople.com/devices/bag/hempbag.html> (last visited July 11, 2009), but David West explained that this would not be the case in modern commercial hemp fields. Rather, these reports rely on historical hemp farming practices when large portions of the plant were left to decompose in the fields and thus replenished the soil naturally. Telephone Interview With David West, *supra* note 88.

cators: total energy use, total carbon dioxide emissions, total waste production, and total use of biocides and other agrochemicals.¹⁶²

Moreover, due to its carbon exchange rate, hemp cultivation has tremendous potential for combating climate change.¹⁶³ Hemp uses significant amounts of carbon dioxide during its photosynthesis process as its large leaves convert the nutrients transported from its roots into food.¹⁶⁴ In the United Kingdom, hemp is planted as part of a carbon-offsetting program funded by charitable donations.¹⁶⁵ The hemp is then either turned into biomass to fuel power plants, used for insulation or animal bedding, or as “building blocks for the Zero carbon homes of the future.”¹⁶⁶

Further, hemp cultivation could prove a boon to American farmers and rural economies. Because of hemp’s bulk, it is most profitable to process the crop close to its source,¹⁶⁷ which would likely mean new processing plants and jobs in agricultural areas. Estimates provided in 2000 by the United States Department of Agriculture (USDA) for the profitability of hemp were highly varied,¹⁶⁸ but suggested that hemp could be particularly profitable in North Dakota.¹⁶⁹ Moreover, as illustrated by the rise in corn prices brought about by

162. Alden, Proops & Gay, *supra* note 159, at 295 tbl.2, 296–98.

163. See *Cannabis Hemp “Key” to Climate Change: Canna Zine*, CANNAZINE, <http://cannazine.co.uk/hemp/hemp-products/-cannabis-hemp-key-to-climate-change-canna-zine.html> (last visited June 7, 2009).

164. See *id.*

165. See The C-Change Trust, Terms and Conditions, <http://www.thec-change.org/aboutus/terms.asp>, (last visited June 7, 2009). The C-Change Trust is a charitable organization located in Bristol, UK, that uses donated funds to establish hemp fields, native forests, and community woodlands to help offset carbon dioxide emissions. According to its website, hemp “more efficiently sequesters atmospheric CO₂ into ‘biomass’ than do forests.” *Id.*

166. *Id.*; see also Natural-Environment.com, *supra* note 43; *supra* notes 43–44 and accompanying text.

167. See Roesler, *supra* note 89, at 28 (explaining that transportation costs are one of the most significant expenses related to hemp cultivation); see also Canada’s Industrial Hemp Industry, *supra* note 31 (explaining that “growers tend to be clustered in loose alliances and co-operatives, or are geographically close to processing facilities in order to keep transportation costs low”); Ryan, *supra* note 59, (quoting the national director of a company conducting biomass field trials of hemp in Ireland: “The main aim is to develop real business opportunities for rural communities in the developing green energy market and to ensure that rural communities continue to benefit long-term from energy production”).

168. For example, estimated net returns for hemp fiber in Kentucky ranged from –\$116 to \$473 per acre; estimated returns for hemp seed ranged from –\$136 to \$604 per acre. U.S. DEP’T OF AGRIC., INDUSTRIAL HEMP IN THE UNITED STATES: STATUS AND MARKET POTENTIAL 18 & tbl.8 (2000), available at <http://www.ers.usda.gov/Publications/AGES001e>. By comparison, the net return is –\$2 for corn grain, \$70 for wheat/soybeans, \$767 for tomatoes, and \$1144 for Burley tobacco. *Id.* In North Dakota, estimated net returns on hemp ranged from \$5.33 to \$141.65 per acre, compared with –\$38.20 for corn, –\$2.31 for wheat, \$0.86 for sunflowers, \$5.48 for barley, and \$444.91 for irrigated potatoes. *Id.* at 21 tbl.14.

169. See *id.* at 18–22.

ethanol production,¹⁷⁰ much has changed in agricultural commodities prices since 2000. Hemp's potential as a replacement for petroleum products suggests that its profitability could be significantly higher than the USDA's 2000 estimates. Thus, hemp's wide range of beneficial uses coupled with its potential to provide processing jobs in or near the agricultural communities where hemp is grown demonstrates that the sixth factor also weighs in favor of registration.

B. Denial of Registration Is Contrary to Legislative Intent

In considering whether registering licensees is "consistent with the public health and safety" and thus in accordance with the law, it is appropriate to consider Congress's views on hemp cultivation when it determined to regulate cannabis under the MTA and CSA. The legislative histories of those statutes suggest that Congress did not share the view, later espoused by executive branch agencies, that hemp production endangers public welfare.

It is clear from the congressional record that the legislature never intended the MTA to prohibit legitimate production of industrial hemp. When the Act was under consideration, Clinton Hester, then Assistant General Counsel at the Treasury Department, assured the Senate Committee on Finance:

The production and sale of hemp and its products for industrial purposes will not be adversely affected by this bill. In general, the term "marihuana" is defined in the bill so as to include only the flowering tops, leaves, and seeds of the hemp plant and to exclude the mature stalk, oil, and meal obtained from the seeds of the plant, and sterilized seed, incapable of germination.¹⁷¹

When asked by the acting chairman of the subcommittee hearings what dangers the bill had "for the persons engaged in the legitimate uses of the hemp plant," Henry Anslinger, Commissioner of Narcotics at the Treasury Department assured him, "I would say they are not only amply protected under this act, but they can go ahead and raise hemp just as they have always done it."¹⁷² When Congress enacted the MTA, it explicitly exempted the parts of

170. In March 2008, corn sold for over \$5 a bushel, compared to under \$2 in 2006. Matthew L. Wald, *Bush Urges Action on Corn Price Rises Fueled by Ethanol*, N.Y. TIMES, Mar. 5, 2008, available at <http://www.nytimes.com/2008/03/05/washington/05cnd-energy.html>. Prices have since dropped to an average of \$3.74 a bushel, but this remains "the third-highest price on record," and both prices and acres planted are projected to increase over the next several years. Charles Abbott, *Ethanol Seen Bolstering U.S. Corn Price, Plantings*, REUTERS, Mar. 6, 2009, <http://www.reuters.com/article/environment/News/idUSTRE52549A20090306>.

171. *Taxation of Marijuana: Hearing on H.R. 6906 Before the S. Comm. on Finance, 75th Cong. 7 (1937)* (statement of Clinton M. Hester, Assistant General Counsel, Treasury Department).

172. *Id.* at 17 (statement of H.J. Anslinger, Comm'r of Narcotics, Bureau of Narcotics of the Treasury Department).

the hemp plant utilized for industrial purposes—stalk fiber, seed oil, and similar derivatives—from the Act’s coverage.¹⁷³

It was the Narcotics Bureau that later placed restrictions on farmers’ abilities to transfer their crops to mills, much to the dismay of legislators. During a Senate Committee on Finance hearing that occurred on May 24, 1945, the Bureau’s Deputy Commissioner, Will S. Wood, and the Committee Chairman, Senator Robert M. La Follette, discussed the agency’s interpretation of the MTA.¹⁷⁴ Although Wood contended that the Bureau did not want to wipe out the hemp industry, he explained that the agency had construed the exemption provision to mean that no mature hemp stalk could be delivered to a processing mill if it had more than ten percent of its leaves attached, which had the practical effect of making it impossible to cultivate commercially;¹⁷⁵ farmers had no cost-effective method to remove the leaves from the stalks, but depended upon the weather to perform this “retting” process.¹⁷⁶ The percentage of leaves that remained on the stalks thus depended on factors outside the farmers’ control.¹⁷⁷ Senator La Follette, clearly frustrated by the explanations he received from Wood, responded, “It is perfectly clear if you read [the Senate committee hearings for the 1937 MTA] that the Senate committee was very much concerned to be certain that in enacting this drastic piece of legislation they weren’t putting the Bureau in a position to wipe out this legitimate hemp industry.”¹⁷⁸

When the MTA was displaced by the CSA in 1970, the provision exempting the parts of the hemp plant utilized for industrial purposes from the Act’s coverage—the stalk fiber, seed oil, and similar derivatives—was adopted verbatim.¹⁷⁹ Maintaining this provision would be illogical unless Congress intended that such products could be legally manufactured. It also seems unlikely that Congress maintained the exemption only to permit hemp importation, because as previously discussed, Section 823(a)(1) uses the phrase “importation *and* bulk manufacture” as opposed to “importation *or*

173. Marihuana Tax Act of 1937 § 1(b), ch. 553, 50 Stat. 551, 551 (repealed 1970).

174. 1945 *Hearing*, *supra* note 21, at 17–18 (statement of Will S. Wood, Deputy Comm’r, Bureau of Narcotics, Treasury Department).

175. *See id.* at 17–19 (statement of Will S. Wood, Deputy Comm’r, Bureau of Narcotics, Treasury Department).

176. *See id.* at 11 (statement of H.S. McCrory, Director, Hemp Division Commodity Credit Corporation, United States Department of Agriculture).

177. *Id.* at 18–19 (statements of Will S. Wood, Deputy Comm’r, Bureau of Narcotics, Treasury Department and Sen. Robert M. La Follette).

178. *Id.* at 18. A provision to counteract the agency’s interpretation was under consideration during the 1945 hearing; however, few committee members were in attendance. *Id.* at 1.

179. *Compare* Marihuana Tax Act of 1937 § 1(b), ch. 553, 50 Stat. 551, 551, *with* Comprehensive Drug Abuse Prevention and Control Act of 1970, 21 U.S.C. § 802(16) (2006).

bulk manufacture,” indicating that for those Schedule I substances for which there are legitimate industrial purposes, Congress intended some domestic manufacturing.¹⁸⁰

Some may contend that keeping the MTA’s language, with knowledge of how the executive branch agencies interpreted it, suggests Congress’s acquiescence to the agencies’ interpretation. However, a more likely explanation is that the agencies’ interpretation was not on Congress’s radar at the time that the CSA was enacted. The CSA is an extremely broad statute covering the manufacture, distribution, and dispensing of every controlled substance,¹⁸¹ and nothing in the legislative history suggests that Congress considered the effects its passage would have on legitimate hemp cultivation. Because domestic hemp farmers planted their last crop in 1958, there was no one left to lobby Congress or to draw its attention to the industrial hemp issue when the CSA was enacted in 1970.¹⁸² Thus, more emphasis should be placed on the congressional intent in 1937, when the legislative history clearly shows the issue was seriously considered. Therefore, the DEA’s uniform denial of applications from prospective hemp growers, or placement of restrictions that are so burdensome as to make hemp cultivation prohibitively expensive, appears to contravene the legislative intent.

Furthermore, included in the legislative history for the CSA of 1970 is a letter from Robert H. Finch, then Secretary of the Treasury, to Harley O. Staggers, the Chairman of the House Committee on Interstate and Foreign Commerce explaining:

Title III provides for the regulation of the manufacture, distribution and dispensing of controlled substances. All persons must obtain an annual registration from the Attorney General before engaging in the manufacture, distribution, or dispensing of any controlled substance. *The Attorney General must establish quotas for the production of schedule I and II substances sufficient to provide for the country’s estimated medical, scientific, and industrial needs for lawful export and for maintenance of reserve stocks.*¹⁸³

180. See *supra* note 120 and accompanying text.

181. See *supra* notes 71–83 and accompanying text.

182. David West proposed this theory in his affidavit for the *White Plume* case. See West Affidavit, *supra* note 2, at para. 40. In *New Hampshire Hemp Council v. Marshall*, 203 F.3d 1 (1st Cir. 2000), the First Circuit acknowledged the “possibility” that Congress may not have adopted the CSA in its current form had it been aware of the affect on industrial hemp cultivation. *Id.* at 7; see also *infra* note 189.

183. H.R. REP. NO. 91-1444, at 67 (1970), as reprinted in 1970 U.S.C.C.A.N. 4566, 4633 (emphasis added).

Given the prior history of domestic hemp production and the multiple industrial applications currently exploited in every other developed nation in the world,¹⁸⁴ it is hard to imagine that the quota sufficient to provide for estimated industrial needs within the United States is zero.¹⁸⁵ In fact, in 1994, President Clinton signed the National Defense Industrial Resources Preparedness Executive Order 12919,¹⁸⁶ which listed hemp among the essential agricultural products that should be stocked for national-security purposes.¹⁸⁷

Indeed, in order to fulfill its obligation, it would seem that the DEA must distinguish between hemp and marijuana so as to ensure that the nation's industrial needs are met. However, the DEA does not draw this distinction; in response to inquiries from the North Dakota agriculture commissioner regarding state license applicants, the DEA sent a letter characterizing the prospective hemp farmers as "manufacturers of marijuana—which is the most widely abused controlled substance in the United States."¹⁸⁸ Contrasting this letter with that from Secretary Finch suggests that the DEA's interpretation of its duties, as they relate to hemp regulation, are contrary to the intentions of Congress when the CSA was enacted in 1970. And, the DEA's interpretation is certainly far afield from the intentions of Congress when the MTA was enacted in 1937.¹⁸⁹

184. See RAWSON, *supra* note 7, at 3.

185. The DEA determines whether or not to grant a license, and then establishes a quota pursuant to its decision. See Controlled Substances: 2000 Aggregate Production Quota, 65 Fed. Reg. 56,328, 56,329 (Sept. 18, 2000). Because there had been no DEA registrants with status as a bulk manufacturer licensed to manufacture hemp, the DEA "had not previously established an aggregate production quota for marihuana greater than zero." *Id.* However, because the agency had granted a bulk manufacturing registration "to an applicant who will cultivate marihuana for scientific research and development purposes" on November 4, 1999, [this was David West, see *supra* notes 125–127 and accompanying text], the DEA proposed revising the aggregate production quota for "marihuana" to 350,000 grams. Controlled Substances: 2000 Aggregate Production Quota, *supra*, at 56,329.

186. Exec. Order No. 12,919, 59 Fed. Reg. 29,525 (June 3, 1994).

187. See *id.* at 29,532 ("Food resources' also means all starches, sugars, vegetable and animal or marine fats and oils, cotton, tobacco, wool, mohair, *hemp*, flax fiber, and naval stores, but does not mean any such material after it loses its identity as an agricultural commodity or agricultural product." (emphasis added)).

188. *Monson v. DEA*, 522 F. Supp. 2d 1188, 1197 (D.N.D. 2007) (quoting Letter From DEA to Roger Johnson, N.D. Agric. Comm'r (Feb. 1, 2007)). The court then described the North Dakota legislature's decision in 2007 to remove the federal registration requirement from N.D.C.C. § 4-41-02(4) because "the DEA's correspondence with state officials indicat[ed] the DEA's intention to review such license requests as if the plaintiffs were simply planning to grow the street drug marijuana." *Id.*

189. See *N.H. Hemp Council v. Marshall*, 203 F.3d 1, 7 (1st Cir. 2000). Referring to the "carrying forward" of the 1937 definition, the First Circuit found that the plaintiff "colorably argues that the 1970 statute should also be read to protect production for industrial uses by interpolating his distinction between psychoactive and non-psychoactive strains of *cannabis sativa*." *Id.* The Court also stated that "[t]he possibility remains that Congress would not have adopted the 1970 statute in its present form if it had been aware of the effect on cultivation of plants for industrial uses"; but it stated that this "is only a possibility." *Id.*

Moreover, at the time the CSA was enacted, displacing the MTA as to marijuana regulation, Congress outlined factors for determining whether or not to list new substances under the Act, and these criteria weigh against treating hemp as a substance that requires tight control. Congress directed the agency to consider: (1) whether people are taking the drug in amounts sufficient to create a health hazard; (2) whether there is “significant diversion . . . from legitimate drug channels”; (3) whether people are taking the substance without the advice of a doctor; (4) whether the drug is so related to a substance “already listed as having a potential for abuse to make it likely that the drug will have the same potentiality for abuse as such drugs”; (5) whether there is scientific evidence of the substance’s pharmacological effects; (6) the “state of current scientific knowledge regarding the substance”; (7) historical and current abuse patterns; (8) the scope, duration, and significance of abuse; (9) risks to public health; (10) whether the substance is likely to create psychological or physiological dependence; and (11) whether the substance is “an immediate precursor of a substance already controlled.”¹⁹⁰

Because of hemp’s low THC level, there simply is no probability of abuse or health hazard, effectively eliminating criteria one, three, nine, and ten. As previously discussed, North Dakota has enacted a regulatory scheme that prevents diversion from legitimate channels and creates scientific testing to ensure low THC level, eliminating criteria two, five, and six. Hemp has a long history of industrial use with no evidence of abuse, eliminating criteria seven and eight. Although hemp is a relative of marijuana, an “immediate precursor,” as defined in 21 U.S.C. § 802(23),¹⁹¹ refers to substances whose

190. Comprehensive Drug Abuse Prevention and Control Act of 1970, Pub. L. No. 91-513, 1970 U.S.C.C.A.N. (84 Stat. 1236) 4566, 4601–03. These factors are laid out in two separate lists within the statute—the first four are to be considered in determining a substance’s potential for abuse “because of its depressant or stimulant effect on the central nervous system or its hallucinogenic effect,” *id.* at 4601, and the last seven relate more generally to whether a substance should be listed. Congress has since amended the statute such that the attorney general need only consider eight factors before listing a new substance:

- (1) Its actual or relative potential for abuse.
- (2) Scientific evidence of its pharmacological effect, if known.
- (3) The state of current scientific knowledge regarding the drug or other substance.
- (4) Its history and current pattern of abuse.
- (5) The scope, duration, and significance of abuse.
- (6) What, if any, risk there is to the public health.
- (7) Its psychic or physiological dependence liability.
- (8) Whether the substance is an immediate precursor of a substance already controlled under this subchapter.

21 U.S.C. 811(c) (2006).

191. 21 U.S.C. § 802(23) states:

The term “immediate precursor” means a substance—

chemical relationship to a substance already controlled creates the potential for abuse. It is the absence of the psychotropic chemical THC that distinguishes hemp from marijuana, thus eliminating criterion eleven as well. Congress's intention in enacting the CSA, as revealed in its criteria for classifying substances, was to regulate substances that create hazards for the public health and safety. Whereas hemp may technically fall within the definition of cannabis, it does not create these hazards. Given that hemp does not pose the kinds of dangers that Congress sought to prevent, denial of registration to North Dakota applicants is not in accordance with the purpose of the CSA. Therefore, not only do the six factors outlined in 21 U.S.C. § 823(a) compel the conclusion that federal registration of prospective North Dakota hemp farmers is in the public interest, but registration appears consistent with legislative intent.

IV. CHALLENGES TO THE DEA'S RESPONSE TO APPLICATIONS

The DEA's failings in handling the applications of North Dakota licensees violate multiple provisions of the Administrative Procedure Act (APA). Its delay in responding to registration applications from farmers may be held to be unreasonable and subject to interlocutory review, and the reviewing court may compel the agency to act.¹⁹² A denial resulting from the DEA's failure to consider each of the six factors required under Section 823(a) may be set aside as an arbitrary and capricious abuse of discretion.¹⁹³ The imposition of overly burdensome security requirements that effectively make it impossible to cultivate hemp may be deemed in excess of its statutory authority, and thus unlawful.¹⁹⁴ Licensees thus have numerous grounds on which they may seek redress under the APA.

(A) which the Attorney General has found to be and by regulation designated as being the principal compound used, or produced primarily for use, in the manufacture of a controlled substance;

(B) which is an immediate chemical intermediary used or likely to be used in the manufacture of such controlled substance; and

(C) the control of which is necessary to prevent, curtail, or limit the manufacture of such controlled substance.

192. See *infra* notes 210–213 and accompanying text.

193. See *infra* notes 227–237 and accompanying text.

194. See *infra* notes 238–250 and accompanying text.

A. Failure to Act Within a Reasonable Time

Under most circumstances a farmer would first need a final order from the DEA denying his application¹⁹⁵ before asking a court to consider whether he is entitled to a license to grow hemp under 21 U.S.C. § 823(a).¹⁹⁶ Thus far, rather than denying applications, the DEA has simply failed to respond in a reasonable time, and no North Dakota licensee has formally been in a position to raise a Section 823(a) challenge. The agency's treatment of North Dakota State University (NDSU)¹⁹⁷ illustrates how its delay in making registration decisions may leave an applicant to languish for years. However, the APA empowers licensees to compel the DEA to act on their applications in a timely manner.

In *Telecommunications Research and Action Center (TRAC) v. F.C.C.*,¹⁹⁸ the D.C. Circuit explained that interlocutory appeals from agency action may be undertaken in cases involving unreasonable agency delay: "It is obvious that the benefits of agency expertise and creation of a record will not be realized if the agency never takes action."¹⁹⁹ Although agencies have "broad discretion" in setting their agendas, an "agency's discretion is not unbounded . . . [E]xcessive delay saps the public confidence in an agency's ability to discharge its responsibilities and creates uncertainty for the parties, who must incorporate the potential effect of possible agency decisionmaking into future plans."²⁰⁰

The *TRAC* court explained that the standard for unreasonable delay is not "ironclad."²⁰¹ It outlined six factors to be considered: (1) the time taken is "governed by a rule of reason"; (2) if Congress has provided a timetable within the enabling statute, "that statutory scheme may supply content for this rule of reason"; (3) delays affecting "human health and welfare" are less tolerable than delays "in the sphere of economic regulation"; (4) whether expediting the delayed action will affect higher priority agency actions; (5) "the nature and extent of the interests prejudiced by delay"; and finally, (6)

195. See 5 U.S.C. § 704 (2006) ("Agency action made reviewable by statute and *final agency action* for which there is no adequate remedy in a court are subject to judicial review." (emphasis added)).

196. But see *infra* note 214, discussing that unreasonable delay may be construed as a de facto denial, and that if a court finds the DEA has predetermined the issue, it may excuse a plaintiff's failure to exhaust administrative remedies.

197. See *supra* notes 89 and 131 and accompanying text.

198. 750 F.2d 70 (D.C. Cir. 1984).

199. *Id.* at 79.

200. *Cutler v. Hayes*, 818 F.2d 879, 896–97 (D.C. Cir. 1987) (quoting *Potomac Elec. Power Co. v. ICC*, 702 F.2d 1026, 1034 (1983)).

201. *TRAC*, 750 F.2d at 80 (citations omitted).

the court may find a delay unreasonable even if there is no “impropriety lurking behind [the] agency lassitude.”²⁰² However, these six factors seem sufficiently obscure to grant courts a great deal of discretion when evaluating a delay.

Pursuant to the APA, licensing decisions must be decided “within a reasonable time.”²⁰³ Although not a timetable, the language of the statute reveals Congress’s intention that applicants not be left to languish awaiting an agency response; thus, under the second factor, a court could determine that delays are less acceptable in licensing cases. The third factor, tolerability of the delay, is more ambiguous: In the case of hemp registration, should granting or denying a license be considered merely an economic issue, or is human welfare at stake, given the potential environmental impacts of prohibiting cultivation? As for the fourth factor, how can a court measure the effect of expediting the delayed action on agency actions of a higher priority? It would seem that an agency could always claim that it has higher priorities.

Thus, rather than focusing on each of these factors, it seems more appropriate to examine whether the DEA’s failure to act on an application to cultivate hemp is generally the type of delay the TRAC court condemned. In the case of NDSU, the answer is clearly yes. The North Dakota legislature had specifically mandated that the university conduct hemp research in an effort to develop production within the state.²⁰⁴ The DEA’s delay therefore created uncertainty not only for NDSU, but frustrated the decisionmaking and future planning of the North Dakota Department of Agriculture. Indeed, when discussing the DEA’s delay in responding to NDSU, the court in *Monson v. DEA*²⁰⁵ characterized waiting for a decision from the agency as “futil[e],”²⁰⁶ and concluded that “[a]s a practical matter, there [was] no realistic prospect that the plaintiffs [would] ever be issued a license by the DEA to grow industrial hemp.”²⁰⁷

The over eight-year delay in responding to NDSU’s application was extreme, but in the case of any North Dakota licensee seeking registration, a much shorter delay should still be deemed unreasonable. It is the nature of agriculture that planting must occur at specific times of the year,²⁰⁸ and thus

202. *Id.*

203. See 5 U.S.C. § 558(c) (2006).

204. See N.D. CENT. CODE § 4-05.1-05 (2008).

205. 522 F. Supp. 2d 1188 (D.N.D. 2007).

206. *Id.* at 1197.

207. *Id.*

208. See Roesler, *supra* note 89, at 28 (explaining that there probably was not enough time for NDSU “to get the seed in the ground in 2008”). Hemp must be planted and harvested in accordance with the seasons. In North Dakota, in order for the crop to complete its life cycle, it should be planted in late April or early May for harvest in September, although harvest varies depending on

when the agency fails to respond to a farmer's application in a timely manner, an entire planting season may be lost. As DEA registration is annual, agency delay could effectively prevent a farmer from ever receiving a valid federal license by planting season.²⁰⁹ Such a failure to respond to the registration applications for hemp cultivation seems to be precisely the type of delay denounced in TRAC. Thus, pursuant to Section 706(1)²¹⁰ of the APA, coupled with Sections 555(b),²¹¹ which requires an agency to act within a reasonable time in all proceedings, and Section 558(c),²¹² which specifically requires an agency to act within a reasonable time when responding to licensing applications, a court of appeals²¹³ may assume jurisdiction and compel DEA action to respond to applications from North Dakota licensees. Should that response be a denial, the court may then review the decision for abuse of discretion.²¹⁴

whether the hemp is grown for fiber or seed. E-mail From David West, Principal Investigator at the Alterna Hemp Research Project (July 13, 2009, 07:26:00 PST) (on file with author).

209. See *supra* note 127 and accompanying text, describing how David West received his annual license one month before it was to expire.

210. “[The reviewing court shall] compel agency action unlawfully withheld or unreasonably delayed” 5 U.S.C. § 706(1) (2006).

211. “With due regard for the convenience and necessity of the parties or their representatives and within a reasonable time, each agency shall proceed to conclude a matter presented to it.” *Id.* § 555(b).

212. Under Section 558 of the APA:

When application is made for a license required by law, the agency, with due regard for the rights and privileges of all the interested parties or adversely affected persons and *within a reasonable time*, shall set and complete proceedings required to be conducted in accordance with Sections 556 and 557 of this title or other proceedings required by law and shall make its decision.

Id. § 558(c) (emphasis added).

213. Additionally, “district courts retain general jurisdiction to review alleged mistreatment by administrative agencies” under 5 U.S.C. § 706(1), and may review claims “that the agency has unreasonably delayed or unlawfully withheld agency action.” *Wedgewood Village Pharmacy, Inc. v. Ashcroft*, 293 F. Supp. 2d 462, 468 (D.N.J. 2003). If the DEA actually conducts a hearing resulting in a factual determination, its decision may be reviewed exclusively in a court of appeal under 21 U.S.C. § 877 (2006).

214. The Supreme Court has explained that the purpose of administrative exhaustion is to prevent “premature interference with agency processes, so that the agency may function efficiently and so that it may have an opportunity to correct its own errors, to afford the parties and the courts the benefit of its experience and expertise, and to compile a record which is adequate for judicial review.” *Weinberger v. Salfi*, 422 U.S. 749, 765 (1975). However, a court may decide a case on the merits without remanding to the agency if the court finds that exhaustion would be futile, because “the administrative body is shown to be biased or has otherwise predetermined the issue before it,” *McCarthy v. Madigan*, 503 U.S. 140, 148 (1992), *superseded by statute*, Civil Rights of Institutionalized Persons Act, Pub. L. No. 96-247, 94 Stat. 349 (1980) (codified at 42 §§ U.S.C. 1997–1997j) (2006)), with respect to federal prisoners. Given the *Monson* court’s conclusion that the DEA had predetermined the case, and there was “no realistic prospect that the plaintiffs [would] ever be issued a license by the DEA to grow industrial hemp,” *Monson v. DEA*, 522 F. Supp. 2d 1188, 1197 (D.N.D. 2007), cases involving North Dakota licensees may fall within the exception to the exhaustion doctrine, such that courts may consider whether denying federal registration is an abuse of discretion before the agency has formally rejected the applicant. As described above, the delay itself may be viewed as a de facto denial.

B. Failure to Consider All Six Factors Under Section 823(a)

A failure to consider all the factors required by statute is an abuse of discretion, and the APA provides significant protections against such arbitrary decisionmaking. When an applicant is denied registration by the DEA, the attorney general must provide an order explaining the basis for the denial and afford him an opportunity for a hearing before an administrative law judge in accordance with the APA²¹⁵ and subject to judicial review in a court of appeals.²¹⁶ At the administrative hearing, the burden of proof to establish that registration would be inconsistent with the public interest under Section 823(a) is on the administrator as an initial matter, and shifts to the applicant only to rebut the agency's evidence.²¹⁷ Under Section 706 of the APA:

The reviewing court shall hold unlawful and set aside agency action, findings, and conclusions found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; [or] . . . in excess of statutory jurisdiction, authority, or limitations or short of statutory right²¹⁹

As this Comment illustrated in Part III, strong arguments can be made as to why all six factors weigh in favor of registration, and thus denial of a North Dakota licensee is not in accordance with law. However, even if one were to be convinced by the DEA's argument that it, rather than the state of North Dakota, has the exclusive duty to protect against diversion of controlled substances into illegal channels,²²⁰ or that registering hemp growers "sends the wrong message"²²¹ regarding the government's attitude towards illegal drugs, the other factors weigh heavily towards granting registration to North Dakota licensees. Furthermore, the DEA must consider all six factors; it may not pick and choose.

215. See 21 U.S.C. § 824(c) (2006) ("Proceedings to deny, revoke, or suspend shall be conducted pursuant to this section in accordance with subchapter II of chapter 5 of title 5."); 21 C.F.R. § 1301.41(a) (2009) ("In any case where the Administrator shall hold a hearing on any registration . . . the procedures for such hearing shall be governed generally by the adjudication procedures set forth in the Administrative Procedure Act . . .").

216. See 21 U.S.C. § 877.

217. See *Shatz v. U.S. Dep't of Justice*, 873 F.2d 1089, 1091 (8th Cir. 1989) (finding that the agency bore the initial burden of proof to establish that a doctor's registration to dispense controlled substances was inconsistent with the public interest under 21 U.S.C. § 823(f) (2006)).

219. 5 U.S.C. § 706(2)(A),(C) (2006).

220. For a discussion of factor one under 21 U.S.C. § 823(a)(1), see *supra* note 99 and accompanying text.

221. For a discussion of factor six under 21 U.S.C. § 823(a)(6), see *supra* note 151 and accompanying text.

The attorney general's duty to consider all factors was tested in *Oregon v. Ashcroft*.²²² After Oregon passed the Death with Dignity Act²²³ authorizing physicians to prescribe drugs to end the lives of the terminally ill, then Attorney General John Ashcroft issued an interpretive rule proclaiming that physician-assisted suicide serves no "legitimate medical purpose" and declaring that the conduct authorized by the Act "may 'render [a practitioner's] registration . . . inconsistent with the public interest' and therefore subject to possible suspension or revocation."²²⁴ The Ninth Circuit held that Ashcroft misinterpreted the CSA in his conclusion that he could evaluate the public interest based on any of the five factors listed in 21 U.S.C. § 823(f).²²⁵ The court held that he must consider all of them.²²⁶ This conflict between Ashcroft's directive and the text of the CSA was one of three reasons that the court found the agency's action to be "in excess of statutory jurisdiction," and set the interpretive rule aside.²²⁷ Sections 823(a) and 823(f) contain the same phrase: "In determining the public interest, the following factors shall be considered . . ." Therefore, failure to consider all six factors when denying registration to a North Dakota licensee would also conflict with the text of the CSA, and constitute grounds for setting aside the denial.

Moreover, the duty to consider all factors applies to the adjudication of individual cases as well as to rulemaking, and Section 706 of the APA requires a court to look at the "whole record"²²⁸ when reviewing an agency's decision. The court must consider both sides of the record²²⁹ and may not merely consider

222. 368 F.3d 1118 (9th Cir. 2004), *aff'd*, *Gonzales v. Oregon*, 546 U.S. 243 (2006). Earlier administrative agency decisions had concluded that it was not necessary to consider all of the factors. See Henry J. Schwarz, Jr., 54 Fed. Reg. 16,422, 16,424 (DEA Apr. 24, 1989) (stating that the factors are independent, and that the Deputy Administrator may revoke a registration to dispense controlled substances on one factor or a combination of several factors).

223. OR. REV. STAT. §§ 127.800–127.995 (2007).

224. *Oregon v. Ashcroft*, 368 F.3d at 1123 (citing *Dispensing of Controlled Substances to Assist Suicide*, 66 Fed. Reg. 56,608 (Nov. 9, 2001) (quoting 21 U.S.C. § 824(a)(4) (2000))).

225. *Id.* at 1127.

226. *Id.*

227. *Id.* (quoting 5 U.S.C. § 706(2)(C), (D) (2000) ("The reviewing court shall hold unlawful and set aside agency action, findings, and conclusions found to be . . . in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; [or] without observance of procedure required by law[.]")).

228. 5 U.S.C. § 706 (2006) ("In making the foregoing determinations, the court shall review the whole record . . .").

229. See *Universal Camera Corp. v. NLRB*, 340 U.S. 474, 487–88 (1951) (explaining that the APA "definitively precludes" courts from determining the substantiality of evidence "merely on the basis of evidence which in and of itself justified it, without taking into account contradictory evidence or evidence from which conflicting inferences could be drawn").

the evidence²³⁰ that supports an agency's conclusion. In *Humphreys v. DEA*,²³¹ the Third Circuit held that revocation of a doctor's registration under Section 823(f) was arbitrary and capricious because the deputy administrator relied on two of five factors in determining whether registration was inconsistent with the public interest, but failed to consider privacy concerns related to the patient and whether the doctor's actions were in the "usual course" of practice.²³² The court explained that an agency's action is arbitrary and capricious when it "fail[s] to consider an important aspect of the problem,' offer[s] an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise."²³³

In the case of North Dakota licensees, the DEA's denial of registration is arbitrary and capricious in each of these three respects. By failing to properly evaluate each of the six factors under 823(a), the DEA similarly disregards "an important aspect of the problem." Given the legislature's intent and the overwhelming evidence that registration of North Dakota licensees is both consistent with the public interest and poses no danger to the public's health and safety, the DEA's denial runs counter to the evidence before the agency and is not plausibly the result of a difference in view or the product of agency expertise.

The fact that courts have been persuaded by the DEA's argument that enforcement concerns justified strict regulation of even nonpsychotropic varieties of cannabis when considering whether hemp falls within the definition of marijuana²³⁴ is beside the point. None of these courts evaluated whether 21 U.S.C. § 823(a)'s six factors weighed in favor of federal registration. Therefore, they were not considering whether the DEA's enforcement concerns were sufficient to justify denying federal licenses to hemp farmers in the context of all the factors weighing in favor of registration.

230. Because denials of registration are subject to formal adjudication under the APA, *see supra* note 215, factual determinations by the DEA should be reviewed under the somewhat less deferential substantial evidence standard. *See* 5 U.S.C. § 706(2)(E) ("The reviewing court shall . . . hold unlawful and set aside agency action, findings, and conclusions . . . found to be unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute[.]"). Although the six-factor test described in 21 U.S.C. § 823(a) requires the agency to exercise discretion, basic factual determinations must also be made, like whether there is a history of abusing hemp, and whether a field of hemp is indeed indistinguishable from a field of marijuana.

231. 96 F.3d 658 (3d Cir. 1996).

232. *Id.* at 663–64.

233. *Id.* at 663 (citations omitted).

234. *See supra* notes 111–114 and accompanying text.

Moreover, because none of these courts conducted a 21 U.S.C. § 823(a) analysis,²³⁵ they were not evaluating the rationality of the DEA's argument in the broader context of North Dakota's regulatory scheme. Because Section 823(a) does not prevent the DEA from considering a state's own precautions against diversion when determining whether registration is consistent with the public interest, and North Dakota's system both ensures that the hemp grown by its licensees has a THC content of 0.3 percent or lower and mandates that farmers provide Department of Agriculture maps of their fields, the DEA's explanation for denial simply is not plausible. While courts "defer to an agency's expert judgment when it is acting within the scope of [a] statute," they "cannot allow expertise to shield an irrational decision-making process."²³⁶ Indeed, the Supreme Court has warned that "unless we make the requirements for administrative action strict and demanding, *expertise*, the strength of modern government, can become a monster which rules with no practical limits on its discretion."²³⁷ The implausibility of the DEA's enforcement arguments in regard to North Dakota licensees, in the context of the overwhelming factors weighing in favor of registration, suggests that denial of registration is the result of an irrational decisionmaking process that should be set aside as arbitrary and capricious.

C. The Imposition of Overly Burdensome Security Measures

The issue of the onerous and expensive security requirements that the DEA placed on hemp cultivators in the two cases²³⁸ in which it eventually granted registration is slightly more complicated because the agency was acting pursuant to its own regulation. Under 21 C.F.R. § 1301.71, the DEA has extremely broad discretion in evaluating an applicant's security system prior to and in conjunction with issuing a license.²³⁹ As the Supreme Court explained in *Thomas Jefferson University v. Shalala*,²⁴⁰ courts must give strong deference to

235. The *Monson* court briefly mentioned the DEA's obligation to evaluate the Section 823 factors, *Monson v. DEA*, 522 F. Supp. 2d 1188, 1192 (D.N.D. 2007), but the plaintiffs did not challenge the DEA's decision based on this evaluation.

236. *Nat'l Res. Def. Council, Inc. v. EPA*, 790 F.2d 289, 298 (3d Cir. 1986) (citing *Motor Vehicle Mfr. Ass'n v. State Farm Mut.*, 463 U.S. 29, 48–49 (1983)).

237. *Motor Vehicle Mfr. Ass'n*, 463 U.S. at 48 (quoting *New York v. United States*, 342 U.S. 882, 884) (1951) (Black, J., dissenting)).

238. See *supra* note 89.

239. Under 21 C.F.R. § 1301.71(b) (2009), "the Administrator *may consider any* of the following factors as he may deem relevant to the need for strict compliance with security requirements" (emphasis added).

240. 512 U.S. 504 (1994).

an agency's interpretation of its own regulations.²⁴¹ However, strong deference does not mean blind deference. In the case of hemp cultivation, courts should not defer to the DEA because permitting the agency to impose these extremely burdensome security requirements makes hemp cultivation unaffordable,²⁴² and thus empowers the agency to entirely suppress the industry.

An interesting comparison may be drawn to the Supreme Court's conclusion in *FDA v. Brown & Williamson Tobacco Corporation*²⁴³ that the Federal Food and Drug Administration (FDA) could not regulate tobacco under the Food, Drug, and Cosmetic Act.²⁴⁴ The Court reasoned that if the FDA had the power to regulate tobacco, under the Act, the agency would have been required to ban it, because tobacco was never "safe."²⁴⁵ The Court concluded that this was clearly not Congress's intention because it had passed numerous laws regulating cigarettes over the past thirty-five years:

Congress could not have intended to delegate a decision of such economic and political significance to an agency in so cryptic a fashion. To find that the FDA has the authority to regulate tobacco products, one must not only adopt an extremely strained understanding of "safety" . . . but also ignore the plain implication of Congress' subsequent tobacco-specific legislation.²⁴⁶

The hemp situation is somewhat different because several courts have found that as a variety of *Cannabis sativa*, hemp is a substance that falls under the DEA's regulatory authority. However, the authority to regulate hemp is not the authority to wipe out the industry altogether. As discussed in Part III, it is clear from the legislative history of the MTA that Congress never intended to empower executive branch agencies to prevent the legitimate cultivation of hemp.²⁴⁷ Further, Congress maintained the exemption for the mature stalks, fiber, oil, and other industrial derivatives from the definition of marijuana, and thus from the DEA's authority to regulate those parts of the hemp plant, when it replaced the MTA with the CSA. This decision suggests that Congress believed that varieties of *Cannabis sativa* could and would be grown

241. *Id.* at 512 ("We must give substantial deference to an agency's interpretation of its own regulations. Our task is not to decide which among several competing interpretations best serves the regulatory purpose. Rather, the agency's interpretation must be given controlling weight unless it is plainly erroneous or inconsistent with the regulation." (internal quotations and citations omitted)).

242. Telephone Interview With David West, *supra* note 88.

243. 529 U.S. 120 (2000).

244. 21 U.S.C. § 301 (2006).

245. *Brown & Williamson Tobacco Corp.*, 529 U.S. at 135–36. Congress has since given the FDA authority to regulate tobacco. See 21 U.S.C.A. § 387a (a)–(b) (2009).

246. *Brown & Williamson Tobacco Corp.*, 529 U.S. at 160.

247. See *supra* notes 171–178 and accompanying text.

for industrial purposes. As with tobacco production, had it been Congress's intention to delegate the decision to wipe out a legitimate industry to a regulatory agency, it would not have done so in "so cryptic a fashion."²⁴⁸ Therefore, despite the strong deference usually given to an agency in interpreting its own regulations,²⁴⁹ courts should hold unlawful and set aside security requirements that make hemp cultivation prohibitively expensive as agency action in excess of statutory jurisdiction or authority under the APA.²⁵⁰

CONCLUSION

The farmers who brought their claims to the First and Eighth Circuits and the North Dakota District Court each argued, unsuccessfully, that hemp does not fit the definition of *Cannabis sativa* L. regulated under the CSA, and thus that they should not be subject to the DEA's registration requirements.²⁵¹ To varying degrees, the courts seemed sympathetic to the plaintiffs' claims but were bound by the language of the CSA. After engaging in a lengthy analysis of the legislative history and the plain meaning of the statute, the First Circuit explained:

Despite the myth that Congress intends every result entailed by its statutes, new laws are often like jigsaw puzzles whose pieces do not quite fit; some have to be squeezed into place and there may be gaps in the pattern. But in this instance, on the issue of whether the statute includes all cannabis sativa plants, the considerations favor a literal reading of the statute and preclude [the plaintiff's] construction.²⁵²

As demonstrated in Part III, were the court to apply the same in-depth analysis to 21 U.S.C. § 823(a), and weigh each of the six factors to determine whether granting registration to North Dakota licensees is consistent with the public interest, it would likely find the DEA compelled to grant registration.²⁵³

Indeed, dictum in the Eighth Circuit and North Dakota decisions reveal the courts' recognition that there is a substantial public interest in growing hemp. The Eighth Circuit explicitly stated: "It may be that the growing of hemp for industrial uses is the most viable agricultural commodity for [the tribal lands

248. *Brown & Williamson Tobacco Corp.*, 529 U.S. at 160.

249. Moreover, in the case of North Dakota licensees, where the state has enacted a comprehensive scheme for ensuring that only low THC is cultivated, see *supra* note 93, imposition of such security measures may be deemed plainly erroneous.

250. See 5 U.S.C. § 706(2)(C) (2006).

251. See *supra* note 95 and accompanying text.

252. *N.H. Hemp Council, Inc. v. Marshall*, 203 F.3d 1, 8 (1st Cir. 2000).

253. The Eighth Circuit cited its duty "to interpret and apply the statute as written by Congress." *United States v. White Plume*, 447 F.3d 1067, 1076 (8th Cir. 2006).

of the Oglala Sioux²⁵⁴]. And we do not doubt that there are a countless number of beneficial products which utilize hemp in some fashion.”²⁵⁵ The district court went further stating: “There seems to be little dispute that the retail hemp market is significant, growing, and has real economic potential for North Dakota.”²⁵⁶ As these courts were not asked to examine the DEA’s duty under Section 823(a), but only to determine whether hemp is a substance regulated under the CSA, whether hemp cultivation was consistent with the public interest was irrelevant. The literal definition of *Cannabis sativa L.* constrained the courts’ decisions. However, should a challenge under Section 823(a) come before a court, the outcome may very well be different. Section 823(a) commands weighing the public interest, and in the case of hemp, it is clear which way the scale tilts.

254. The story of Alex White Plume and the Oglala Sioux’s struggle to grow hemp at South Dakota’s Pine Ridge Reservation is told in the documentary *Standing Silent Nation*. STANDING SILENT NATION (Prairie Dust Films, LLC in association with P.O.V./American Documentary Inc. 2007). Relying on government subsidies and living in poverty, the Oglala Sioux barely survived growing corn and barley and raising horses on their arid reservation. However, hemp flourished there without expensive or toxic chemicals. Believing the tribe was exempt from the federal registration requirements, just as tribes are exempt from federal gambling laws, the Oglala Sioux passed an ordinance permitting cultivation in 1998 and White Plume and his family planted their first hemp crop in April 2000. On August 24, 2000, federal agents “armed with guns and weed-whackers” destroyed his crop in a surprise raid. Press Release, P.O.V. Commc’ns, Native Americans Growing Hemp Find That Tribal Sovereignty Collides With Government Policy in P.O.V.’s “Standing Silent Nation,” Tuesday, July 3 on PBS, available at http://www.amdoc.org/pressmaterials/standing/standing_release.pdf. For a detailed synopsis of the film, see Pbs.org, *Standing Silent Nation*, <http://www.pbs.org/pov/pov2007/standing/about.html> (last visited June 7, 2009).

255. *White Plume*, 447 F.3d at 1076.

256. *Monson v. DEA*, 522 F. Supp. 2d 1188, 1202 (D.N.D. 2007).