"Raised Without Antibiotics" print advertisement), 63.4% of respondents reported that a "no antibiotics" claim was communicated and about half (54.9%) referred to "no antibiotics" without mentioning antibiotic resistance. In addition, 9.2% of respondents mentioned "no antibiotics" and "antibiotic resistance" as separate but related ideas. Quite significant to this Court is the fact that only 4.6% of respondents understood the claim to mean what the experts at the USDA understood it to mean—*i.e.,* that Tyson uses antibiotics, but that the antibiotics it uses do not cause antibiotic resistance in humans.

Professor Mazis testified that the participants appeared to break down the qualified "Raised Without Antibiotics" into two distinct parts. The first part, "Raised Without Antibiotics," was taken literally by participants to mean that Tyson's chicken was not given antibiotics, which is not accurate. The second part of the qualified claim, "that impact antibiotic resistance in humans," was taken by participants to mean that Tyson's chicken does not impact antibiotic resistance in humans *because* Tyson's chicken has no antibiotics, which is also inaccurate. Taken together, participants largely misunderstood the entire qualified claim to mean that Tyson's chicken had no antibiotics and therefore could not impact antibiotic resistance in humans.[FN9] Indeed, based on Professor Mazis's testimony, this Court finds that the qualifying language may actually serve to reinforce the false impression that Tyson's chicken is antibiotic-free.

FN9. The following sample responses were included in Professor Mazis's expert report (Pls.' Supp. Mot. Prelim. Inj. Ex. 3):

- "These chickens were raised without antibiotics. It does not impact resistance in humans." (# 01202);
- "No antibiotics in chicken. Resistance for us humans." (# 01909);
- "The chicken was raised without antibiotics. Makes humans more resistant." (# 04306);
- "The chicken from Tyson is raised without antibiotics. It cuts down on antibiotics' resistance in humans." (# 07804);
- "That this chicken is raised and fed right, without antibiotics so that people will not become resistant to antibiotics." (# 08617);
- "Chicken without antibiotics. It won't affect your immunity to antibiotics." (# 11612);
- "That their chickens are antibiotic free. It makes us less resistant to them if they don't have them." (# 01215); and
- "That the chickens don't have antibiotics fed to them. That it doesn't affect antibiotic resistance in humans." (# 11610).

B. Close–Ended Questions—Participants Believed That Tyson's Chicken Was Safer and Healthier

Participants were first asked "[w]hat is the name of the company that put out or sponsored the advertisement that you just looked at?" If the participant answered this question correctly, the following series of additional close-ended questions was asked:

Q2—"What is the main idea that the advertisement is trying to communicate? Anything else?"

Q3—"Does or doesn't the advertisement (TV commercial) imply or state anything about Tyson chicken and antibiotics?" If the respondent answered affirmatively, he or she was also asked question ***501** Q3A: "What does the advertisement imply or state about Tyson and antibiotics? Anything else?"

Q4—"Does or doesn't the advertisement imply or state anything about Tyson chicken and taste?" If the respondent answered affirmatively, he or she was also asked Q4A: "What does the advertisement imply or state about Tyson and taste? Anything else?"

Question four specifically asked about something entirely unrelated to this lawsuit, *i.e.,* taste, to avoid highlighting the focus of the study.

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In analyzing these closed-ended questions, Professor Mazis concluded that the respondents in the "qualified" cell (cell three) provided similar responses to the advertisements as respondents in the two "unqualified" cells (cells one and two). In response to Q3, 85.1% and 79.1% of respondents in the two "unqualified" cells thought the advertisement they had seen implied or stated something about Tyson and antibiotics, while 81.0% of respondents in the "unqualified" cell answered the same way.

Respondents were then told that a series of statements would be read to them, some, all or none of which may have been implied by or stated in the Tyson advertisement. The respondent was then told to answer: (1) yes, the statement was implied; (2) no, the statement was not implied; (3) I don't know whether the statement was implied; or (4) no opinion. The respondent was then read the following statements, the order of which was rotated differently for each respondent:

- Tyson chicken is fresher than other chicken
- Tyson chicken is safer than other chicken
- Tyson chicken contains more protein than other chicken
- Tyson chicken is better for you than other chicken
- Tyson chicken tastes better than other chicken
- Tyson chicken is more healthful than other chicken

The questions asking about whether Tyson's chicken was safer, better for you, and more healthful were the most relevant to this lawsuit. The other questions were asked so that the purpose of the questions remained unknown.

First, Professor Mazis calculated the percentage of people who believed that Tyson's chicken was safer, more healthful, or better for you. Next, he adjusted the results for "noise" (*e.g.,* guessing, pre-existing beliefs, suggestive question wording, bias, etc.) by subtracting the percentage of positive responses obtained from the control cell. The following chart summarizes the consumer survey data, with the boldfaced number indicating the final results of the survey:

	Tyson chicken is safer than other chicken	Tyson chicken is more healthful than other chicken	Tyson chicken is better for you than other chicken
Cell One—	65.6% - 29.9% =	72.1% - 46.3% =	60.4% - 46.3% =
"Unqualified" TV	**35.7%**	**25.8%**	**14.1%**
Cell Two—	59.1% - 29.9% =	68.2% - 46.3% =	57.1% - 46.3% =
"Unqualified" Print	**29.2%**	**21.9%**	**10.8%**
Cell Three—	63.4% - 29.9% =	70.6% - 46.3% =	60.1% - 46.3% =
"Qualified" Print	**33.5%**	**24.3%**	**13.8%**

***502** Based on the responses controlled for noise, about one-third of all respondents in cells one, two and three—including both unqualified and qualified language—agreed that the advertisement communicated that Tyson's chicken is safer than other chicken, and about one-quarter of respondents in cells one, two, and three—again, including both unqualified and qualified language—agreed that the advertisement communicated that Tyson's chicken is more healthful. Because all three chicken producers in this action use ionophores, these figures represent nothing less than consumer deception about the relative safety and health of Tyson's chicken. Moreover, the percentages remained consistent for all three implied claims of superiority (safer, more healthful, and better for you), regardless of whether the lan-

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guage was unqualified (cells one and two) or qualified (cell three). In fact, for print advertisements (cells two and three), a greater percentage of respondents who viewed the qualified language believed that it contained an implied claim of superiority than did respondents who viewed the unqualified language.

CONCLUSIONS OF LAW

[1][2] Under Rule 65 of the Federal Rules of Civil Procedure, the decision whether to issue a preliminary injunction is committed to the sound discretion of the trial court. *Hughes Network Sys. v. InterDigital Commc'ns Corp.,* 17 F.3d 691, 693 (4th Cir.1994). To determine whether a preliminary injunction is appropriate, the court must apply the four-factor hardship balancing test established by the United States Court of Appeals for the Fourth Circuit in *Blackwelder Furniture Co. of Statesville, Inc. v. Seilig Manufacturing Co.,* 550 F.2d 189 (4th Cir.1977). The four *Blackwelder* factors are 1) the likelihood of irreparable harm to the plaintiff if injunctive relief is denied, 2) the likelihood of harm to the defendant if injunctive relief is granted, 3) the likelihood that the plaintiff will succeed on the merits, and 4) the public interest. *Id.* at 195; *see also Rum Creek Coal Sales, Inc. v. Caperton,* 926 F.2d 353, 359 (4th Cir.1991).

In *Scotts Co. v. United Industries Corp.,* 315 F.3d 264 (4th Cir.2002), the Fourth Circuit summarized the proper analysis to determine whether a preliminary injunction should be granted:

> When deciding whether to grant a preliminary injunction, the court must first determine whether the plaintiff has made a strong showing of irreparable harm if the injunction is denied; if such a showing is made, the court must then balance the likelihood of harm to the plaintiff against the likelihood of harm to the defendant. If the balance of the hardships "tips decidedly in favor of the plaintiff," ... then typically it will "be enough that the plaintiff has raised questions going to the merits so serious, substantial, difficult and doubtful, as to make them fair ground for litigation and thus for more deliberate investigation,".... But if the balance of hardships is substantially equal as between the plaintiff and defendant, then "the probability of success begins to assume real significance, and interim relief is more likely to require a clear showing of a likelihood of success."

Id. at 271 (internal citations omitted); *see also Sun Microsystems, Inc. v. Microsoft Corp.,* 333 F.3d 517, 526 (4th Cir.2003) (stating that the *Blackwelder* test represents a "sliding scale that demands less of a showing of likelihood of success on the merits when the balance of hardships weighs strongly in favor of the plaintiff, and vice versa").

***503** [3] Applying the *Blackwelder* factors, this Court concludes that Plaintiffs' Supplemental Motion for Preliminary Injunction should be granted. The preliminary injunction proceeding in this case was extensive. Although naturally incomplete at this stage in the litigation, the record is hardly insufficient and this Court does not reach its legal conclusions in haste. *See Sole v. Wyner,* 551 U.S. 74, 127 S.Ct. 2188, 2195, 167 L.Ed.2d 1069 (2007) ("In some cases, the proceedings prior to a grant of temporary relief are searching; in others, little time and resources are spent on the threshold contest.").

I. Likelihood of Irreparable Harm to Plaintiffs If Injunctive Relief Is Denied

Based on the consumer survey, this Court finds that Plaintiffs have demonstrated that consumers are in fact misled by Defendant's advertisements. This Court also finds that, even in the absence of a presumption, the continuation of Defendant's advertisements during the pendency of this case will cause further harm that is neither "remote nor speculative, but actual and imminent." *Scotts Co.,* 315 F.3d at 271.

A. Evidence of Consumer Confusion

In *Scotts Co.,* the Fourth Circuit "did not reach the issue [of an irreparable harm presumption] in a false advertising context because the plaintiff had failed to make a prima facie showing of consumer confusion." *Pediamed Pharms., Inc. v. Breckenridge Pharm., Inc.,* 419 F.Supp.2d 715 (D.Md.2006) (citing *Scotts Co.,* 315 F.3d at 272). The presumption that was not addressed by the Fourth Circuit was discussed in *United Industries Corp. v. Clorox Co.,* 140 F.3d 1175 (8th Cir.1998),

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where the United States Court of Appeals for the Eighth Circuit suggested that a presumption of irreparable harm should be applied in all Lanham Act false advertising cases where the plaintiff has established a tendency to deceive.[FN10] *Id.* at 1183.

FN10. As the Fourth Circuit explained in *Scotts Co.,* some courts limit the presumption to cases involving direct comparative advertising. 315 F.3d at 273–74; *see Ortho Pharm. Corp. v. Cosprophar, Inc.,* 32 F.3d 690, 696 (2d Cir.1994) (explaining that the presumption of irreparable harm is generally limited to cases involving false comparative advertising); *Mutual Pharm. Co. v. Ivax Pharms., Inc.,* 459 F.Supp.2d 925, 944–45 (C.D.Cal.2006) ("Outside the context of comparative advertisements (that is, those that make no direct reference to a competitor's product), a presumption of irreparable injury to a party is unwarranted."); 4 J. Thomas McCarthy, *McCarthy on Trademarks and Unfair Competition* § 27:37 at 27–75 to 27–76 (4th ed. 2006) ("Where the challenged advertising makes a misleading comparison to a competitor's product irreparable harm is presumed. But if the false advertising is non-comparative and makes no direct reference to a competitor's product, irreparable harm is not presumed.").

Although Plaintiffs' consumer survey indicates that one third of consumers believe that Defendant's advertisements make an implied claim of safety superiority, and that one fourth of consumers believe Defendant's advertisements make an implied claim of health superiority, the claims are clearly not direct claims of superiority. Therefore, the comparative advertising presumption is inapplicable in this case.

The Fourth Circuit noted that other district courts in this circuit have applied the *United Industries* presumption. *See Scotts Co.,* 315 F.3d at 273 (citing *JTH Tax, Inc. v. H & R Block Eastern Tax Servs., Inc.,* 128 F.Supp.2d 926, 948 (E.D.Va.2001) ("[A] demonstration that the competitor's advertising tends to mislead consumers satisfies the [Lanham] Act's irreparable harm requirement."), *aff'd in part, vacated in part, and remanded,* 28 Fed.Appx. 207 (4th Cir.2002) and ***504** *Black & Decker (U.S.) Inc. v. Pro–Tech Power Inc.,* 26 F.Supp.2d 834, 862 (E.D.Va.1998) ("Courts have explained that a demonstration that the competitor's advertising tends to mislead consumers satisfies the Lanham Act's irreparable harm requirement.")). In *JTH Tax,* the district court explained that, "[b]ecause it is 'virtually impossible to prove that so much of one's sales will be lost as a direct result of a competitor's advertisement,' a demonstration that the competitor's advertising tends to mislead consumers satisfies the [Lanham] Act's irreparable harm requirement." 128 F.Supp.2d at 948 (internal citations omitted).

In this case, unlike in *Scotts Co.,* Plaintiffs have sufficiently demonstrated consumer confusion. There are two distinct aspects to this inquiry, each requiring different quanta of proof: "If the advertising is literally false, no evidence of consumer confusion is required. But if the advertising is impliedly false, the plaintiff must present extrinsic evidence of consumer confusion." *Scotts Co.,* 315 F.3d at 274.

Plaintiffs have established the literal falsity of Defendant's unqualified "Raised Without Antibiotics" claim. Indeed, the evidence before this Court conclusively demonstrates that the United States Department of Agriculture, the Food and Drug Administration, and the American Veterinary Medical Association, as well as the scientific community at large, are all in agreement that ionophores are antibiotics. Having demonstrated the literal falsity of the unqualified "Raised Without Antibiotics" claim and having demonstrated consumer confusion, Plaintiffs have established irreparable harm as to Defendant's unqualified "Raised Without Antibiotics" claim.

Plaintiffs have also established that the qualified "Raised Without Antibiotics" claim leads to consumer confusion. Because the qualified language, "Raised Without Antibiotics that impact antibiotic resistance in humans," was approved for labels by FSIS as being not "false and misleading," *see* Poultry Products Inspection

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Act, 21 U.S.C. § 457(b)-(c), this Court will not consider the claim to be literally false, at least not at the preliminary injunction stage of this litigation. Nonetheless, Plaintiffs' consumer survey sufficiently demonstrates that "a not insubstantial number of consumers" are likely to be confused or misled. *Johnson & Johnson * Merck Consumer Pharms. Co. v. Smithkline Beecham Corp.,* 960 F.2d 294, 298 (2d Cir.1992).

Plaintiffs' consumer survey found that 63.4% of respondents reported that the qualified "Raised Without Antibiotics" language meant that Defendant used no antibiotics in its chicken. The consumer survey also found that 54.9% of respondents referred to "no antibiotics" without mentioning anything about the qualifying language "that impact antibiotic resistance in humans." Defendant's own expert witness, Steve Roth, acknowledged during his testimony that these figures far exceed the level of consumer survey evidence usually required by courts. *See, e.g., Novartis Consumer Health, Inc. v. Johnson & Johnson–Merck Consumer Pharms. Co.,* 290 F.3d 578, 594 (3d Cir.2002) ("We believe that survey evidence demonstrating that 15% of the respondents were misled ... is sufficient to establish the 'actual deception or at least a tendency to deceive a substantial portion of the intended audience,' necessary to establish a Lanham Act claim for false or misleading advertising." (internal citation omitted)).[FN11]

FN11. *See also Stiffel Co. v. Westwood Lighting Group,* 658 F.Supp. 1103, 1114 (D.N.J.1987) (finding that between 22% and 57% of potential consumers being misled was sufficient to warrant preliminary injunctive relief under the Lanham Act); *R.J. Reynolds Tobacco Co. v. Loew's Theatres, Inc.,* 511 F.Supp. 867, 876 (S.D.N.Y.1980) (finding between 20% and 33% of consumers being deceived sufficient to warrant preliminary injunctive relief); *McNeilab, Inc. v. Am. Home Prod. Corp.,* 501 F.Supp. 517, 527 (S.D.N.Y.1980) (finding 23% of consumers being confused sufficient to support a claim that the Lanham Act had been violated).

***505** Having heard testimony for four days and having reviewed hundreds of exhibits, this Court is convinced by a preponderance of the evidence that a substantial percentage of consumers are misled by Defendant's advertisements carrying the message "Raised Without Antibiotics that impact antibiotic resistance in humans." The qualifying language does not appear to serve its intended purpose—the consumer is still led to believe that Defendant does not use antibiotics, when in fact Defendant uses ionophores in its chicken feed and injects its chicken eggs with antibiotics. Indeed, the qualification may only serve to reinforce that Defendant's chicken is "Raised Without Antibiotics," a claim that is literally false.

Moreover, Plaintiffs' consumer survey does not suffer from the flaws highlighted by the Fourth Circuit in *Scotts Co.* In *Scotts Co.,* the Fourth Circuit found that the critical issue in the case was not adequately answered by the questions posed in the consumer survey and that the answers given to those questions were ambiguous. *See Scotts Co.,* 315 F.3d at 279. Plaintiffs' consumer survey answers the precise issue in his case, *i.e.,* whether Defendant's qualified "Raised Without Antibiotics" claim misleads the consumer into believing that Defendant does not use antibiotics. Furthermore, the consumer survey answers are not ambiguous—the sample responses underscore the fact that a substantial portion of consumers do not appear to understand that Defendant's chicken is not antibiotic-free. *See supra* note 9 (listing sample responses of survey participants that understood the qualified "Raised Without Antibiotics" advertisements to mean that Defendant did not use antibiotics).

Therefore, this Court credits Plaintiffs' consumer survey and finds that the results establish consumer confusion. Therefore, Plaintiffs have met their burden of establishing the irreparable harm prong of the *Blackwelder* analysis.

B. Financial Impact on Plaintiffs

Alternatively, even in the absence of any presumption, Plaintiffs have demonstrated that they will suffer irreparable harm that is "neither remote nor speculative, but actual and imminent." *Scotts Co.,* 315 F.3d at 271 (citations omitted). Defendant's advertising campaign

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has already had a "dramatic" effect on its sales, directly resulting in a thirty-five million pound increase. During the same time period, Defendant's advertisements have had a negative impact on Plaintiffs' respective businesses. Sanderson submitted evidence establishing that it lost a $4.1 million account, and Perdue submitted evidence that it lost three accounts totaling approximately $10 million.

Indeed, Defendant believed that the advertising campaign caused incalculable loss to Perdue. Internal memoranda indicate that Defendant's advertising campaign "wrecked Perdue's overall enterprise strategy" and that "elevating the Tyson brand with RWA has also devalued the Perdue brand." (Pls.' Ex. 106.) This is precisely the sort of loss that the issuance of a preliminary injunction is designed to prevent. As a result, a preliminary injunction would serve to limit the continued gravitation of consumer purchasing decisions towards Defendant's product as a ***506** result of the qualified "Raised Without Antibiotics" advertising campaign.

Moreover, there is no evidence before this Court showing that the damage already incurred by Plaintiffs will not be made worse during the pendency of this case. *See Scotts Co.,* 315 F.3d at 283–84 (finding that the plaintiff had not met its burden of "actual and imminent" irreparable harm largely because of a slow industry-specific business cycle during the pendency of the trial). Tellingly, even while the status of the "Raised Without Antibiotics" label was in flux, internal memoranda indicated that "no one should be holding up anything because of the RWA labeling issue" and that employees should "GO! GO! GO!" forward with the advertising campaign. A similarly aggressive position could be taken while Defendant awaits a trial on the merits.

Accordingly, this Court finds that Plaintiff has made a strong showing of irreparable harm if the injunction is denied. Such a showing has been made through evidence of consumer confusion and continued economic harm.

II. Likelihood of Irreparable Harm to Defendant If Injunctive Relief Is Granted

This Court finds that there is virtually no harm whatsoever to Defendant with respect to non-label advertisements carrying the unqualified "Raised Without Antibiotics" claim. Defendant has informed this Court that they are currently in the process of removing all "Raised Without Antibiotics" advertisements from the marketplace. Thus, a preliminary injunction ensuring that this occurs only reinforces the status quo by way of a court order. On the unqualified "Raised Without Antibiotics" claim, the scale tips decidedly in favor of Plaintiffs.

As to non-label advertisements carrying the qualified "Raised Without Antibiotics" claim, Defendant will undoubtedly incur substantial costs associated with removing advertising from the marketplace upon the issuance of a preliminary injunction, FN12 which offsets at least part of the financial harm Plaintiffs argue they will suffer if this Court does not issue a preliminary injunction. Defendant also argues that the issuance of a preliminary injunction would result in "consumer mistrust and the loss of goodwill." (Def.'s Mem. Opp'n Prelim. Inj. 6.)

FN12. The costs will be mitigated by the bond to be posted by Plaintiffs under Rule 65(c) of the Federal Rules of Civil Procedure. In *Scotts Co.,* the Fourth Circuit found that the defendants would "suffer only minimal harm" despite the fact that they "would incur the monetary costs of complying with the injunction by creating new packaging or placing stickers to cover the offending graphic on the existing packaging." 315 F.3d at 285 (citing *Hoechst Diafoil Co. v. Nan Ya Plastics Corp.,* 174 F.3d 411, 421 n. 3 (4th Cir.1999) ("In fixing the amount of an injunction bond, the district court should be guided by the purpose underlying Rule 65(c) , which is to provide a mechanism for reimbursing an enjoined party for harm it suffers as a result of an improvidently issued injunction or restraining order.")).

The Fourth Circuit has admonished district courts not to give short shrift to irreparable harm that may appropriately be characterized as self-inflicted by the de-

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fendant. In *Scotts Co.,* the Fourth Circuit explained that "[i]f self-made harm is given substantially less weight, as it was by the district court in this case, then the balance of the harms will almost always favor the plaintiff, thus transforming a preliminary injunction from an extraordinary remedy into a routine occurrence." 315 F.3d at 284. This Court does not substantially minimize the harm that might befall Defendant upon the issuance of a preliminary injunction, but it does note that such harm could have been mitigated, if not prevented, through the adoption***507** of a less aggressive marketing position. The evidence plainly indicates that Defendant's executives identified an opportunity to increase the company's market share and sought to capitalize on that perceived opportunity despite full knowledge of the risk. Mr. Hogberg candidly acknowledged that he continually assessed the risks associated with Defendant's marketing campaign and that Defendant's executives "made the call" to move forward notwithstanding the risks. *See NaturaLawn of Am., Inc. v. West Group, LLC,* 484 F.Supp.2d 392, 402 (D.Md.2007) (noting that harm created by the defendant's "own willful acts" is "a factor that the court is entitled to consider").

Moreover, not only have Plaintiffs demonstrated that they will suffer irreparable harm if injunctive relief is denied, but, as will be discussed below, Plaintiffs have convinced this Court that there is an extremely high likelihood of success on the merits. As such, the fact that Defendant may suffer some degree of irreparable injury upon the issuance of a preliminary injunction is alone insufficient for this Court to forgo granting it. Therefore, balanced against the harm that will be suffered by Plaintiffs if the preliminary injunction is not issued, this Court finds that the scale tips slightly in Plaintiffs' favor on the qualified "Raised Without Antibiotics" claim.

III. Likelihood That Plaintiff Will Succeed on the Merits

The Fourth Circuit has explained that "the balance-of-the-hardship question is intertwined with questions about the merits." [FN13] *Scotts Co.,* 315 F.3d at 272. As noted above, extensive evidence was presented by Sanderson, Perdue, and Tyson during the four-day hearing. Indeed, with the submission of hundreds of exhibits and the testimony of key witnesses, this Court has, in effect, conducted a mini-trial. This Court has based its factual findings on an extensive record, including a comprehensive consumer survey submitted by Plaintiff. For many of the same reasons discussed in the first *Blackwelder* factor, this Court finds that there is a very strong likelihood that Plaintiffs will succeed on the merits in a trial before a jury.

FN13. Indeed, the *Scotts Co.* court found that the plaintiff did not meet its burden under either the irreparable harm prong or the likelihood of success prong for the exact same reason. *See* 315 F.3d at 283 (finding, in the irreparable harm inquiry, that "because we have rejected [the plaintiff's] evidence of consumer confusion (and its various arguments as to why no extrinsic evidence was required), it follows that the district court erred by applying the presumption of irreparable harm, a presumption that was dependent on [the plaintiff] establishing consumer confusion"); *id.* at 285 (finding that "because the evidence presented by [the plaintiff] is insufficient to show a likelihood of consumer confusion, [the plaintiff] has therefore failed to show a likelihood of success on the merits").

[4] The elements of a false advertising claim under the Lanham Act are as follows:

(1) the defendant made a false or misleading description of fact or representation of fact in a commercial advertisement about his own or another's product;

(2) the misrepresentation is material, in that it is likely to influence the purchasing decision;

(3) the misrepresentation actually deceives or has the tendency to deceive a substantial segment of its audience;

(4) the defendant placed the false or misleading statement in interstate commerce; and

(5) the plaintiff has been or is likely to be injured as a

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result of the misrepresentation,***508** either by direct diversion of sales or by a lessening of goodwill associated with its products.

Scotts Co., 315 F.3d 264 at 272 (citing *Cashmere & Camel Hair Mfrs. Inst. v. Saks Fifth Ave.,* 284 F.3d 302, 310–11 (1st Cir.), *cert. denied,* 537 U.S. 1001, 123 S.Ct. 485, 154 L.Ed.2d 396 (2002)).

With respect to the first element, the unqualified "Raised Without Antibiotics" claim is literally false, and the qualifying language has proven to be of little effect to the consumer, as demonstrated by Plaintiffs' consumer survey. Furthermore, Defendant's advertising does not communicate to the consumer the fact that Defendant injects antibiotics into its chicken eggs two to three days before hatch.

The evidence also demonstrates that Defendant's misrepresentation is material. Nine out of ten consumers considered it important to have antibiotic-free chicken and a claim of antibiotic-free chicken is the second most important claim that consumers looked for when shopping for chicken. Therefore, Plaintiffs are likely to succeed on the second and third elements. The fourth element will be met because Defendant's advertisements were clearly disseminated nationwide. The fifth element will likely be met for the same reasons this Court found that Plaintiffs are likely to suffer irreparable harm in the absence of a preliminary injunction.

Defendant again makes the same argument in defense of this motion as it did in support of its Motion to Dismiss, which was denied by this Court by Order dated April 14, 2008 (Paper No. 73.) In short, Defendant argues that "courts repeatedly have rejected Lanham Act claims based upon advertisements that simply repeat information in labeling that a government agency has determined not to be 'false or misleading.' " (Def.'s Mem. Opp'n Prelim. Inj. 6–7.) Defendant relied on cases involving the FDA, an agency with substantially broader jurisdiction than the USDA, the government agency at issue in this case. Unlike the FDA, the USDA does not have congressional authority to review advertisements. Therefore, this Court held that

> a non-label false advertising claim brought under the Lanham Act is not precluded because the language on which the claim is based was approved for use on labels by the USDA. The opposite conclusion would extend USDA expertise into an area, *i.e.,* advertising, which the agency has no congressional authority to enter, while at the same time significantly curtailing the congressional protections explicitly accorded to "persons engaged in such commerce" under the Lanham Act.

(Mem. Op. 20.) For the reasons stated in the Memorandum Opinion (Paper No. 72), this argument is without merit.

IV. The Public Interest

The public interest is served by the issuance of a preliminary injunction in this case. There is a significant and immediate public interest concern when specific advertising misrepresents that a product is something that it is not, even if the product does not pose an immediate health or safety concern. *See Scotts Co.,* 315 F.3d 264 at 286 ("[T]here is a strong public interest in the prevention of misleading advertisements.") (citing *Novartis Consumer Health, Inc. v. Johnson & Johnson–Merck Consumer Pharms. Co.,* 290 F.3d 578, 587 (3d Cir.2002)).

This Court is satisfied that the consumer public is being misled by Defendant's "Raised Without Antibiotics" advertising. Defendant's chicken is not "Raised Without Antibiotics" when ionophores are used in chicken feed and other antibiotics are injected into the chicken egg two to three days before hatch. This Court, having heard testimony and reviewed voluminous ***509** exhibits and a comprehensive consumer survey, is satisfied that the qualifying language, *i.e.,* "that impact antibiotic resistance in humans," is not understood by a substantial portion of the consumer public. Indeed, it may even reinforce consumer misconception. Defendant has persisted in this advertising effort since September 2007, when the USDA clearly placed Defendant on notice that it intended to revoke its prior label approval because ionophores are antibiotics. The public interest compels that this advertising stop and that a preliminary injunction be issued in this case.

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CONCLUSION

For the reasons stated in this Memorandum Opinion, Plaintiffs' Supplemental Motion for Preliminary Injunction (Paper No. 44) is GRANTED. Pursuant to Rule 65(d) of the Federal Rules of Civil Procedure, a separate Order detailing the scope of the preliminary injunction follows.

PRELIMINARY INJUNCTION ORDER

For the reasons stated in the accompanying Memorandum Opinion issued this date, pursuant to Rule 65(a) of the Federal Rules of Civil Procedure, this Court, having conducted a hearing over four days between April 7, 2008 and April 10, 2008 and having considered memoranda and oral arguments, as well as testimony and evidence submitted by the parties, finds that Plaintiffs Sanderson Farms, Inc. and Perdue Farms, Inc. will suffer imminent and irreparable harm from non-label advertising being disseminated by Defendant Tyson Foods, Inc., unless Defendant is preliminarily enjoined as set forth in this Order. Accordingly, it is this 22nd day of April 2008, HEREBY ORDERED:

1. That Plaintiffs' Supplemental Motion for a Preliminary Injunction (Paper No. 44) is GRANTED, as follows:

a. That Defendant must remove any and all non-label advertisements, as defined in paragraphs 1.c and 1.d, containing language claiming that its chicken products are "Raised Without Antibiotics," regardless of whether the statement has qualifying language such as "Raised Without Antibiotics that impact antibiotic resistance in humans";

b. That Defendant is further enjoined from using non-label advertisements, as defined in paragraphs 1.c and 1.d, containing language claiming that its chicken products are "Raised Without Antibiotics," regardless of whether the statement has qualifying language such as "Raised Without Antibiotics that impact antibiotic resistance in humans," during the pendency of this case;

c. That non-label advertising consists of television commercials, radio spots, print ads, billboards, circulars, and posters;

d. That non-label advertising also consists of any and all labeling, including point-of-purchase materials, that contain either the "Raised Without Antibiotics" or "Raised Without Antibiotics that impact antibiotic resistance in humans" language in association with other promotional language and images, regardless of whether such articles are located in proximity to Defendant's chicken products; and

e. That Defendant's labels are exempt from this Order and consist of language placed immediately upon Defendant's chicken products or container.

2. It is HEREBY FURTHER ORDERED that:

a. This Order shall take effect at 12:01 a.m., Thursday May 1, 2008, so as to accord Defendant an opportunity***510** to appeal the issuance of this Preliminary Injunction Order to the United States Court of Appeals for the Fourth Circuit;

b. By 12:01 a.m., Thursday May 1, 2008, Plaintiffs shall post a bond, not to be released unless by further Order of this Court. The amount of the bond will be set by this Court by 5:00 p.m., Friday, April 25, 2008 after the parties have had an opportunity to file submissions on their respective positions on the appropriate amount of the bond;

c. Upon the effective date of this Order, pursuant to Rule 65(d)(2)(C), Defendant shall notify all retailers and other third parties disseminating its advertising of the scope and effect of this Order;

d. This Order shall remain in effect pending a trial in this matter; and

e. The Clerk of this Court transmit copies of this Order and accompanying Memorandum Opinion to counsel for both parties.

D.Md.,2008.
Sanderson Farms, Inc. v. Tyson Foods, Inc.
547 F.Supp.2d 491, 2008-1 Trade Cases P 76,159

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Division 4. Misrepresentation
Chapter 22. Misrepresentation And Nondisclosure Causing Pecuniary Loss
Topic 1. Fraudulent Misrepresentation (Deceit)
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§ 538A. Opinion

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A representation is one of opinion if it expresses only
(a) the belief of the maker, without certainty, as to the existence of a fact; or
(b) his judgment as to quality, value, authenticity, or other matters of judgment.

Comment:

a. So far as justifiable reliance by the recipient of the misrepresentation is concerned, a distinction is made in §§ 539, 542 and 543 between representations of fact and those of opinion. As is indicated in those Sections, the recipient may under some circumstances not be justified in relying upon a representation of opinion concerning a fact, although he would be justified in reliance upon a representation of the fact itself.

b. Fact and opinion. A representation of fact is a positive assertion that the fact is true. It implies that the maker haaedefinite knowledge or information which justifies the positive assertion. A representation of opinion, on the other hand, is only one of the maker's belief as to the fact. It implies that he does not have definite knowledge, that he is not sufficiently certain of what he says to make the positive statement, or at most, as stated in § 539, that he knows of no facts incompatible with the belief, or that he does know some facts that justify him in forming it. The difference is one between "This is true," and "I think this is true, but I am not sure."

One common form of opinion is a statement of the maker's judgment as to quality, value, authenticity or similar matters as to which opinions may be expected to differ. Thus the statement that an automobile is a good car is a relative matter, depending entirely upon the standard set as to what is a good automobile and what is not, and it is a matter upon which individual judgments may be expected to differ. The maker of a statement of this nature will normally be understood as expressing only his own judgment and not as asserting anything concerning horsepower, riding qualities or any of the dozen other factors that would influence his judgment.

c. Form of the statement. The form of the statement is important and may be controlling. "I believe that there are ten acres here," is a different statement, in what it conveys, from "The area of this land is ten acres." The one conveys an expression of some doubt while the other leaves no room for it.

d. The form of the statement is not, however, controlling in all cases. A statement that is in form one of posit-

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ive assertion of a fact may be made under such circumstances that it must be understood as conveying only an expression of the maker's belief, not free from doubt. This may be true particularly when the recipient knows that the maker has not information concerning the fact asserted and therefore can only be stating his belief. Less frequently a statement made, for the sake of politeness or modesty, in the form of an opinion may reasonably be understood as an assertion of definite knowledge. The question is thus not alone one of the language used but of the sense in which it is reasonably understood.

Illustration:

1. A, seeking to sell land to B, says to B: "There is water under this land, and if you dig a well anywhere on the land you will strike it." B knows that no water survey has been made and that A has no information concerning the presence or absence of subterranean water. The statement is one of opinion.

e. Quantity as a fact. A statement of the quantity of either land or chattels is a statement of fact. A purchaser of either is entitled to assume that the vendor knows the acreage of the land or the quantity of a lot of goods that he is selling. This is true although the vendor's statement does not assert or imply that it is based upon a survey of the land or a measurement, weighing or count of the goods.

The words "more or less" accompanying a statement of quantity do not make the statement one of opinion. They merely indicate that there is a certain margin offeror and, although they do not justify the recipient in believing that the statement is intended to express an exact measurement, they justify him in believing that the quantity is substantially as stated.

f. Quality, when a fact. A representation of quality is usually a representation of opinion, particularly when goods are bought upon inspection. Therefore the recipient's justification for his reliance upon such a representation is determined by the rules stated in §§ 542-543. There are, however, many articles in which the gradations of quality are so marked that they are customarily sold as of a specified grade. A false representation that such an article is of a particular grade is a misrepresentation of fact.

g. Price, when a material fact. A statement of the price at which goods have been sold or offered for sale is a statement of a fact, which may or may not be material. The price at which goods or securities are sold on a commodity or stock exchange represents a concurrence of the opinion of the interested public as to their value, and therefore justifies the recipient of a statement of market quotations in accepting it as conclusive proof of the value of the article in question. A sale of auction of goods orrsecurities differs in one particular from a sale on an exchange in that there is normally no such attendance of a sufficient number of prospective buyers and sellers as to make the price realized conclusive as to the value of the articles sold. It is, however, evidence of their value; and the recipient of a statement of the price realized at an auction sale may justifiably take it into account in forming his own opinion, although in doing so he should make allowance for the lack of publicity and, in the case of a forced sale, for the exigencies of the vendor. Normally the price realized at a private sale of the article in question or an offer made for it is a fact properly taken into account in determining the value of the article. When, however, the recipient of a representation as to the price realized or offered knows the circumstances of the transaction and the characteristics of the persons engaged therein, the price paid or offered is important primarily as implying the opinion that the parties to the sale or offer had of the value of the article in question. To this extent the question whether the recipient of a misstatement of such a fact is justified in relying upon it as showing the value of the article in question is determined by the rules stated in § 542 if the purchaser or offeror is known to have an interest in the pending transaction antagonistic to that of the recipient and by the rules stated in § 543 when the recipient reasonably believes that the purchaser or offeror is disinterested.

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REPORTER'S NOTE

This Section is new.

Illustration 1 is based upon Harris v. Delco Products, Inc., 305 Mass. 362, 25 N.E.2d 740 (1940).

See generally Sorrells v. Clifford, 23 Ariz. 448, 204 P. 1013 (1922); Borba v. Thomas, 70 Cal.App.3d 144, 138 Cal.Rptr. 565 (1977); Chavez v. Citizens For a Fair Farm Labor Law, 84 Cal.App.3d 77, 148 Cal.Rptr. 278 (1978); Bennett v. Kiggens, 377 A.2d 57 (D.C.App.1977); Parker v. Arthur Murray, Inc., 10 Ill.App.3d 1000, 295 N.E.2d 487 (1973); Stacey v. Robinson, 184 Mo.App. 54, 168 S.W. 261 (1914); Clark Sanitation Inc. v. Sun Valley Disposal Co., 87 Nev. 338, 487 P.2d 337 (1971); Ryan v. Collins, 496 S.W.2d 205 (Tex.Civ.App.1973), refused no reversible error; Jeffcoat v. Phillips, 534 S.W.2d 168 (Tex.Civ.App.1976), refused no reversible error; Saxby v. Southern Land Co., 109 Va. 196, 63 S.E. 423 (1909); Batchelder v. Birchard Motors, 120 Vt. 429, 144 A.2d 298 (1958); Penney v. Pederson, 146 Wash. 31, 261 P. 636 (1927); White v. Ogburn, 528 P.2d 1167 (Wyo.1974).

See articles cited in Note to § 539.

COURT CITATIONS TO RESTATEMENT, SECOND

Tentative Draft 10

Mass.1972. Cit. in sup. Plaintiff landowner brought this action against a real estate broker with regard to two parcels of land: two counts for deceit and breach of implied warranties; and three counts for slander of title, and interference with contractual relations, and breach of implied warranties. The court held that the plaintiff stated a cause of action against his broker, employed as exclusive agent, for deceit and breach of warranties, for violating his duty to plaintiff by misrepresenting the number of acres on the first tract, thereby inducing plaintiff to sell the land for one-half or less of its fair market value; and plaintiff stated causes of action as declared in the other three counts against plaintiff's nonexclusive agent for underrepresenting the number of acres in the second tract. Erikson v. O'Brien, 362 Mass. 876, 289 N.E.2d 831, 832.

Cross References to

1. Digest System Key Numbers

Fraud 20

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2. A.L.R. Annotation

Misrepresentation as to third person's present intention as to future act as actionable fraud. 40 A.L.R.2d 971.

Misrepresentations as to financial condition or credit of third person as actionable by one extending credit in reliance thereon. 32 A.L.R.2d 184.

— June 1987:Case Citations 1978 — June 1987:

D.D.C.1986. Cit. in ftn. §§ 538A-539. (Erron. cit. as s 538a.) Transcendental meditation students sued the founders of the transcendental meditation movement, alleging that the representations made by the defendants that the practice of transcendental meditation would lead to, inter alia, perfect health, eternal youth, and the ability to fly, constituted fraud. The defendants alleged that the representations were statements of opinion, not fact, and therefore could not be the basis of a fraud action. This court denied the defendants' motion for summary judgment, noting that a trier of fact could find fraud where a speaker's statement is founded on an opinion or factual prediction which the listener is incapable of interpreting or cannot verify because the facts necessary for verification are unavailable to him. Doe v. Yogi, 652 F.Supp. 203, 208.

Ill.App.1985. Cit. in sup. A purchaser at a sheriff's sale attempted to vacate the sale and to have his purchase money returned on the basis of alleged misrepresentations made by the mortgagee's representative. The representative had stated that according to the information in her file there were no other encumbrances on the property, but that she was not sure because it was not her case. The trial court confirmed the sale, and the appellate court affirmed. The court held, inter alia, that plaintiff had failed to prove a fraudulent misrepresentation by the representative because the tort required, among other things, a false statement of material fact, and the representative's statement was one of opinion because it merely expressed the attorney's belief, without certainty, as to the existence of encumbrances. Marino v. United Bank of Illinois, N.A., 137 Ill.App.3d 523, 92 Ill.Dec. 204, 484 N.E.2d 935, 937.

Utah, 1980. Com. (e) quot. in disc. Vendors brought a mortgage foreclosure action against the purchasers of a certain parcel of land. The purchasers counterclaimed, alleging fraud and negligent misrepresentation based on representations by the vendors that the parcel of land contained over 22 acres when it actually contained only 6.9 acres. A judgment was entered in favor of the vendors, and the purchasers' counterclaims were dismissed. The purchasers appealed. The appellate court stated that where circumstances are such that the vendor is presumed to know the facts to which his representation relates, a misrepresentation is fraudulent even though not made knowingly, willfully, or with actual intent to deceive. The court also found that testimony as to the standard of care to determine the accuracy of information in a listing should have been included because it could have established a basis to recover for fraudulent misrepresentation. The judgment was reversed, and the case was remanded. Dugan v. Jones, 615 P.2d 1239, 1246-47.

— June 1998:Case Citations July 1991 — June 1998:

N.D.Ill.1997. Cit. in case quot. in disc. Developer sued village officials for, inter alia, fraud, conversion, and defamation after defendants requested that bank call the entire balance of village's letter of credit on the ground that developer failed to perform under the terms of the subdivision ordinance. Defendants moved to dismiss, arguing, among other things, that the certification that village clerk presented to bank merely stated

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defendants' opinion that plaintiff had failed to comply with the ordinance. Granting the motion in part and denying it in part, the court held that plaintiff's allegations were sufficient to state a claim for fraud, since bank interpreted the certification as a statement of fact and, under the terms of the letter of credit, was required to pay defendants upon the present of such a statement; however, dismissal was appropriate with respect to the remaining state law claims. Union Pacific R. Co. v. Village of S. Barrington, 958 F.Supp. 1285, 1297.

D.N.J.1989. Cit. in ftn. The co-owners of a nuclear power plant sued its operating owner for breach of contract, negligence, misrepresentation, and fraud arising from the shutdown of the Pennsylvania power plant. This court denied the operator's motion to dismiss the tort claims; however, it granted the motion to dismiss the fraud claim for lack of particularity, with leave to amend. The court stated that as to the tort claims, Pennsylvania law could subject a party to tort liability for improperly performing its contractual duties such as not responding to reports of control room employees sleeping on the job, misinforming the plant's co-owners that there were no major operating problems, and receiving reports that the operation was not up to industry standards without reporting this to the co-owners. The court also found that an allegation that the operator had fraudulently told the co-owners in the post-shutdown period that "things were going well" while knowing a dramatic corporate restructuring was necessary was pleaded with sufficient particularity, even though the operator contended these allegations dealt with opinions. Public Service Ent. Group v. Philadelphia Elec., 722 F.Supp. 184, 217.

D.S.C.1990. Quot. in sup., com. (b) quot. generally in sup. A tenant who was assaulted in her apartment sued the company that managed the apartment complex, alleging negligence and fraud. Granting the defendant's motion for summary judgment in part, this court held that neither South Carolina common law nor the South Carolina Residential Landlord and Tenant Act imposed a duty upon a landlord to protect tenants from criminal activity, and that statements the defendant's rental agent made concerning the safety of the complex could only be characterized as opinion and could not support a fraud claim. The court stated that the agent's statement that the complex was "safe" simply reflected the speaker's judgment about the quality of life at the apartments. It noted that safety was a vague term that would not be susceptible of exact knowledge in the way that the profitability of a business would be. However, the court also held that issues of material fact existed as to whether the defendant had negligently left an unsecured ladder nearby and whether that ladder was used by the assailant. Cooke v. Allstate Management Corp., 741 F.Supp. 1205, 1216.

Colo.App.1996. Com. (b) quot. in sup. State board of medical examiners charged physician with violations of the Colorado Medical Practice Act (MPA), alleging that physician had committed various acts of substandard medical practice. The administrative law judge agreed with board and recommended that physician's license be suspended for two years. Affirming, this court held, in part, that physician violated the MPA by engaging in pharmaceutical advertising that was misleading, deceptive, or false. It rejected physician's argument that statements in the advertisements constituted opinion, rather than fact, explaining that the ads implied physician's definite knowledge of the positive assertions made about the advertised drug. Colorado State Bd. of Medical Examiners v. Thompson, 944 P.2d 547, 550.

Del.Super.1990. Com. (b) cit. in sup. A criminal defendant sued his court-appointed defense attorney for, inter alia, common-law fraud by misrepresentation of the level of his legal skills and experience. The trial court granted the attorney's motion to dismiss for failure to state a claim, and this court affirmed, holding that the claim could not be sustained because the defendant's complaint failed to allege any factual bases to support a claim for common-law fraud. The court also determined that the attorney's alleged representation that he was

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an experienced and competent criminal defense attorney and would provide skillful representation in a diligent manner was a mere expression of his own opinion as to the value and quality of his legal abilities and was not actionable, as such expressions are generally recognized to be matters upon which individual judgments may be expected to differ. Browne v. Robb, 583 A.2d 949, 956, certiorari denied 499 U.S. 952, 111 S.Ct. 1425, 113 L.Ed.2d 477 (1991).

Ill.App.1995. Cit. in headnote, cit. in case quot. in disc. Limited partners in real estate limited partnerships sued general partners after the limited partnerships failed to provide them either profits or tax benefits, alleging, inter alia, that defendants fraudulently induced plaintiffs to invest. Affirming the trial court's dismissal of the complaint, this court held that plaintiffs failed to state a claim for common law fraud, since the allegedly false statements of fact in the offering documents were accompanied by meaningful cautionary statements that rendered reliance on those facts immaterial as a matter of law. The court also noted that, generally, financial projections were considered to be nonactionable statements of opinion, not fact. Lagen v. Balcor Co., 274 Ill.App.3d 11, 210 Ill.Dec. 773, 775, 778, 653 N.E.2d 968, 970, 973.

Ill.App.1998. Cit. in headnote, quot. in disc., cit. in case quot. in disc., com. (b) quot. in part in disc. Companies that hired futures trader on the basis of a letter of recommendation provided by the chairman of the Chicago Board of Trade sued Board for, inter alia, fraudulent misrepresentation, alleging that chairman should have disclosed that trader had been the subject of disciplinary action. The trial court dismissed the complaint. Affirming, this court held, in part, that chairman's comments regarding trader's intelligence, innovativeness, and competence were statements of opinion and, as such, could not support an action for fraud. Neptuno v. Arbor, 295 Ill.App.3d 567, 568, 571, 229 Ill.Dec. 823, 824, 827, 692 N.E.2d 812, 813, 816.

Mass.App.1995. Cit. in headnotes, quot. in sup. Plaintiff, who was told by real estate agent that the condominium unit he was purchasing had no noise problems, brought a misrepresentation action against agent and realty corporation after plaintiff began to experience noise and vibrations in his unit due to the operation of an air-conditioning chiller system. Reversing the trial court's grant of defendants' motions to dismiss, this court held, inter alia, that defendant agent's statement was one of fact, as required to support plaintiff's misrepresentation claim, rather than merely a statement of opinion. The court said that it was reasonable for plaintiff to infer that agent knew facts to justify her opinion, since agent's employer, defendant realty corporation, maintained an office at the condominium building as an on-site realtor and had been involved in the sale of the units from the time of the complex's original conversion into condominiums. McEneaney v. Chestnut Hill Realty Corp., 38 Mass.App.Ct. 573, 575, 650 N.E.2d 93, 94, 96.

Mass.App.1997. Quot. in case quot. in diss. op. Over a period of five weeks a car dealership general manager sold to a customer who was mentally impaired six new pickup trucks on terms that resulted in between four to six times the normal profit margins. The manager was convicted of six counts of larceny of property and larceny by false pretenses. This court affirmed the convictions, holding, inter alia, that the elements of larceny by false pretenses were proved at trial. The dissent argued that the exploitation of an elderly or disabled person was not, without more, a crime in Massachusetts. Until the legislature decided to enact appropriate remedial legislation, the buyer's lack of capacity to understand and consent to the unfair transactions imposed upon him by the defendant had no bearing on defendant's crime. It also argued that there was no evidence of a false statement of material fact, because the purchase contracts prepared by the defendant and signed by the buyer were barren of any words of representation. It stated that where a contract merely recites the financial terms of a transaction, it is unreasonable to conclude that those financial terms may be taken as a representation as to the fair value of the vehicles bought and sold. The dissent also stated that offers and counteroffers,

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without more, were not representations of value, much less a representation of the speaker's honest belief in the fairness of the offer. Com. v. Reske, 43 Mass.App.Ct. 522, 684 N.E.2d 631, 636.

Mo.App.1991. Coms. (a) and (b) quot. in disc. A husband and wife interpreted statements made by an agent of a finance company as being equivalent to an opinion of the value of a house that they wished to purchase and, under the circumstances, an implied representation as to the value. The couple sued the finance company for fraud and negligence in the appraisal of the value of the house. After a jury returned a verdict for the plaintiffs, the trial court granted the defendant's motion for judgment n.o.v. Affirming, this court held that the plaintiffs had failed to prove a submissible case of fraud because the element of falsity was not proven as to any representation. The court stated that the expression of opinion by the defendants to the plaintiffs that the house was worth the $69,500 purchase price did not include an implied representation of material fact under the circumstances. Wion v. Carl I. Brown & Co., 808 S.W.2d 950, 955.

Mo.App.1996. Cit. in headnote and sup. Buyer of a cow, her calf, and her embryos sued seller for, among other claims, fraud, breach of fiduciary duty, and breach of an agreement to pool the parties' heifers and embryos. Trial court granted seller summary judgment. This court affirmed in part, reversed in part, and remanded, holding, inter alia, that plaintiff failed to plead a cause of action for fraud based on her execution of the pooling agreement. The seller's representation that a pooling agreement would best protect buyer's cattle purchase was clearly an opinion because it was an expression of seller's agent's judgment. Buyer did not allege that the agent had any superior knowledge or expertise in cattle insurance or cattle pooling and did not allege any factual basis to support the falsity of this advice. Arnold v. Erkmann, 934 S.W.2d 621, 623, 628.

Mont.1989. Coms. (a)-(g) cit. in disc. An employee, claiming he was promised a bright future and job security with his company as long as he competently performed his job, was fired allegedly because of unresolved intracompany conflicts. The employee sued his employer for wrongful discharge, fraud, breach of implied covenant of good faith and fair dealing, and negligent misrepresentation. The trial court found for the employer. Reversing, this court held that the jury instruction failed to tell the jury the nature and extent of the implied covenant of good faith and fair dealing. The court rejected the employee's argument that the instruction given on constructive fraud was repetitious and misleading where the employer's statement to the employee was a statement of opinion, not fact, and lacked elements of concealment or falsity. Hobbs v. Pacific Hide and Fur Depot, 236 Mont. 503, 771 P.2d 125, 132.

Wis.App.1989. Cit. in disc. A paper manufacturer sued the manufacturer of a "white liquor clarifier" machine for economic damages resulting from the alleged malfunction of the purchased clarifier, which was needed in the manufacturing process of paper. The paper manufacturer asserted claims for negligent design and negligent misrepresentation, inter alia. The trial court granted summary judgment for the clarifier manufacturer on all claims. This court affirmed, determining that the complaint failed to state a misrepresentation claim because there was no allegation that the defendant represented that the clarifier would last any minimum length of time, only that the clarifier would have a "long equipment life." The court concluded that the representations were "puffing" and could not support a misrepresentation claim. Consolidated Papers, Inc. v. Dorr-Oliver, Inc., 153 Wis.2d 589, 451 N.W.2d 456, 459, review denied 457 N.W.2d 323 (1990).

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C.A.1, 1999. Quot. in disc. Retired employees sued employer for, in part, misrepresentation, alleging that defendant failed to disclose to them that it was contemplating an early retirement incentive program. The dis-

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trict court granted summary judgment for defendant on the misrepresentation claim. Affirming in part, this court held, inter alia, that statements made to several of the plaintiffs represented nothing more than the declarant's opinion as to the prospect of future changes in retirement benefits; thus, those plaintiffs' misrepresentation claims were properly dismissed as failing to meet the "statement of fact" requirement under Massachusetts law. Rodowicz v. Mass. Mutual Life Ins. Co., 192 F.3d 162, 175, rehearing en banc denied 195 F.3d 65 (1st Cir.1999).

C.A.1, 2001. Quot. in case quot. in disc. Buyer of polyvinyl chloride roofs sued manufacturer for, among other things, deceit and negligent misrepresentation after one of its roofs shattered. The district court granted defendant summary judgment. Affirming, this court held, inter alia, that statements of opinion could not give rise to action for deceit absent evidence that manufacturer knew that its statements were false at the time they were made, and manufacturer could not be held liable for negligent misrepresentation absent evidence that it should have known that its statements were false. Cummings v. HPG Intern., 244 F.3d 16, 21.

N.D.Ala.2010. Quot. in case quot. in sup. Public corporation that purchased a surety bond sued surety, alleging misrepresentation, deceit, and other claims, after surety's credit rating was downgraded. Granting defendant's motion to dismiss, this court held, among other things, that the statements purportedly relied on by plaintiff as to, among other things, defendant's ability to maintain a AAA rating, were nonactionable statements of opinion. Although the statements addressed important issues, including defendant's underwriting standards and risk exposure, in order to form a basis for fraud, they had to be statements of fact that were capable of being proven true or false; statements that an insurer was "very cautious" or had "rigorous underwriting standards" did not lend themselves to such proof. Water Works Bd. of City of Birmingham v. Ambac Financial Group, Inc., 718 F.Supp.2d 1317, 1322.

D.Mass.2004. Quot. in case quot. in sup. Administrative law judge (ALJ) affirmed federal agency's assessment of penalties against owner of scalloper ship for fishing in closed area and making false statement to Coast Guard officer. This court granted in part and denied in part parties' motions for summary judgment, holding that it would vacate agency's finding of liability under claim for making false statements, since substantial evidence did not exist to support ALJ's finding that owner made false statements to officer. Owner's statement that there were "approximately 2,500 lbs" of scallops in the hold was one of estimation or opinion only; there was no scale on board, and owner testified that he ordinarily measured quantity of scallops by bag, not by weight. Lobsters, Inc. v. Evans, 346 F.Supp.2d 340, 346.

D.Mass.2010. Quot. in case quot. in sup. Insured under a financial guarantee insurance policy for certain bonds it issued to fund the construction of a stadium sued insurer for intentional misrepresentation, negligent misrepresentation, and statutory violations, alleging that insurer made false representations regarding its credit rating; insurer counterclaimed for breach of the policy. Granting summary judgment for insurer, this court held that insured could not, as a matter of law, show that insurer induced insured to enter into the policy through an intentional misrepresentation that would render the policy unenforceable; among other things, some of the alleged misrepresentations were general statements of opinion about the quality of services that insurer would provide, and there was no ascertainable standard by which to judge their truth. NPS, LLC v. Ambac Assur. Corp., 706 F.Supp.2d 162, 173.

S.D.N.Y.2007. Quot. in sup. Hotel operators that agreed to convert their hotels into a particular hotel-franchise brand sued franchisors for, in part, common-law fraud, after franchisors sold the franchise chain to a third party. Granting summary judgment for defendants, this court held that, although one of the plaintiffs

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demonstrated a triable material issue of fact with respect to alleged material false representations made to it that defendants intended to keep the franchise brand, it failed to show any fact issues with regard to the elements of fraudulent intent or the reasonableness of its reliance on the alleged statements; the other plaintiff failed to show triable fact issues as to any of those elements. The court noted that when one of defendants' representatives said, "[D]on't worry, everything's going to be fine," it was no more than a statement of his opinion on which plaintiffs could not reasonably have relied. Century Pacific, Inc. v. Hilton Hotels Corp., 528 F.Supp.2d 206, 230.

D.Vt.2001. Cit. in disc. Landlord that objected to the volume of the music played by tenant retailer in its store sued tenant for damages and termination of the lease. Tenant counterclaimed for, in part, fraudulent and negligent misrepresentation. Granting landlord summary judgment on tenant's fraudulent-misrepresentation counterclaim, the court held that tenant failed to prove that it justifiably relied on a general statement of opinion from landlord that landlord's building would be an ideal location for one of tenant's stores. Howard Opera House Associates v. Urban Outfitters, Inc., 166 F.Supp.2d 917, 927, affirmed 322 F.3d 125 (2d Cir.2003).

Cal.App.2000. Cit. in disc. Developer of a proposed project to build an ice and hockey arena in a former Air Force base commissary building sued accounting firm and a principal in the firm for negligent misrepresentation with regard to, in part, the building's value. Affirming the trial court's grant of summary judgment for defendants, this court held, inter alia, that the representation was not actionable because it was an opinion as to a future event. Defendants merely predicted that an appraiser would value the property at $5 million, and that such an appraisal would be needed for a lender to make a $3 million loan to convert the property to its new intended use. Neu–Visions Sports, Inc. v. Soren, 86 Cal.App.4th 303, 103 Cal.Rptr.2d 159, 162.

Cal.App.2002. Quot. in sup. Purchasers of fraudulently autographed sports-related collectibles sued Internet auction company for negligent misrepresentation based on the statement on defendant's web site that a positive rating was "worth its weight in gold." Affirming the trial court's judgment of dismissal, this court held, inter alia, that the statement could not support a cause of action for negligent misrepresentation because it amounted to a general statement of opinion, rather than a positive assertion of a past or existing material fact on which a consumer could reasonably rely. Gentry v. eBay, Inc., 99 Cal.App.4th 816, 835, 121 Cal.Rptr.2d 703, 718.

N.M.App.1998. Cit. in sup. Former chief executive officer of natural resources corporation brought suit for breach of contract against oil company that had entered into an asset-purchase agreement with the resources corporation. The oil company counterclaimed for fraud. The trial court granted summary judgment for executive on the complaint and counterclaim. Reversing the entry of summary judgment on the counterclaim and remanding, this court held, in part, that a material issue of fact, precluding summary judgment, existed as to whether oil company was justified in relying on executive's alleged misrepresentations regarding the value of the resources corporation's assets. The court stated that the adversarial quality of the parties' relationship and prior dealings, manifested by protracted compensation negotiations and accusations of self-dealing that led oil company to force executive from his former position, was not sufficient to permit a grant of summary judgment on the ground that oil company's reliance was unjustified. Lotspeich v. Golden Oil Co., 125 N.M. 365, 961 P.2d 790, 794.

Tenn.2010. Com. (c) quot. in sup. Buyers of new residential construction brought fraudulent-misrepresentation claim against real estate appraiser hired by the bank that financed the construction, alleging that appraiser recklessly overestimated the value of the proposed construction in a report prepared for the bank.

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The trial court granted summary judgment for appraiser. The court of appeals affirmed. Reversing and remanding, this court held that an appraisal was an opinion of value that could form the basis of a fraudulent-misrepresentation claim. The court accordingly rejected appraiser's argument that his report, which stated that it provided an estimate of the market value of the proposed construction, could not provide a basis for buyers to show at trial that he made a representation of an existing or past fact, a required element of a claim for intentional misrepresentation. Davis v. McGuigan, 325 S.W.3d 149, 155.

Wash.App.2002. Cit. in disc. Seller of a Titanic survivor's ticket and postcards brought suit for, in part, fraudulent misrepresentation against antiques dealer to whom he sold the items, after defendant resold the items for a large profit. The trial court entered judgment on a jury verdict for plaintiff. Affirming, this court held, inter alia, that the question of whether defendant's representations of value were representations of existing fact or expressions of personal opinion about potential future value was for the jury to determine. Westby v. Gorsuch, 112 Wash.App. 558, 50 P.3d 284, 291.

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ConsumerReports.org

Consumer Reports investigation: Talking turkey

Our new tests show reasons for concern

Consumer Reports magazine: June 2013

In our first-ever lab analysis of ground turkey bought at retail stores nationwide, more than half of the packages of raw ground meat and patties tested positive for fecal bacteria. Some samples harbored other germs, including salmonella and staphylococcus aureus, two of the leading causes of foodborne illness in the U.S. Overall, 90 percent of the samples had one or more of the five bacteria for which we tested.

Adding to the concern, almost all of the disease-causing organisms in our 257 samples proved resistant to one or more of the antibiotics commonly used to fight them. Turkeys (and other food animals, including chickens and pigs) are given antibiotics to treat acute illness; but healthy animals may also get drugs daily in their food and water to boost their rate of weight gain and to prevent disease. Many of the drugs are similar to antibiotics important in human medicine.

That practice, especially prevalent at large feedlots and mass-production facilities, is speeding the growth of drug-resistant superbugs, a serious health concern. People sickened by those bacteria might need to try several antibiotics before one succeeds. (Related: Read "Has Your Steak Been Mechanically Tenderized?" That report details a process that can drive bacteria like the deadly pathogen E. coli O157:H7 from the surface deep into the center of the meat.)

Among our findings:

- Sixty-nine percent of ground-turkey samples harbored enterococcus, and 60 percent harbored Escherichia coli. Those bugs are associated with fecal contamination. About 80 percent of the enterococcus bacteria were resistant to three or more groups of closely related antibiotics (or classes), as were more than half of the E. coli.
- Three samples were contaminated with methicillin-resistant staphylococcus aureus (MRSA), which can cause fatal infections.
- Ground turkey labeled "no antibiotics," "organic," or "raised without antibiotics" was as likely to harbor bacteria as products without those claims. (After all, even meat from organic birds can pick up bacteria during slaughter or processing.) The good news is that bacteria on those products were much less likely to be antibiotic-resistant superbugs.

Germ count

We found many samples of turkey that harbored germs, especially the fecal bacteria enterococcus and E. coli. (Some forms of E. coli can cause severe illness, but our tests didn't differentiate among the forms. In any case, you don't want E. coli in your food.)

Levels of contamination

Bacterium	Positive samples
Enterococcus	69%
Escherichia coli	60
Staphylococcus aureus	15
Salmonella	5
Campylobacter	0

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Get more details on our data.
Consumer Reports Ground Turkey By Plant (54kb)
Consumer Reports Ground Turkey Drug Resistance (84kb)

From barn to burger

Conventionally raised turkeys are fed mostly corn and soybean meal plus a vitamin and mineral supplement. They usually get FDA-approved antibiotics that may be given in low doses without a prescription. Before the birds are killed, antibiotics must be withdrawn to ensure that residues clear from the birds' systems.

But harm may already have been done. Although the antibiotics eventually kill off vulnerable barnyard bugs, bacteria that are immune to their effects can flourish and spread. They can exchange genetic material with other bugs, further accelerating antibiotic resistance. And bacteria on turkeys can develop resistance to similar drugs that aren't even given to turkeys.

Some bacteria that end up on ground turkey, including E. coli and staph aureus, can cause not only food poisoning but also urinary, bloodstream, and other infections.

Antibiotics aren't allowed in turkeys labeled "organic," "no antibiotics," or "raised without antibiotics." (Sick birds may be treated, but they're then sold to nonorganic markets.) Organic birds must eat only certified organic feed and pasture, which means no genetically modified organisms; and production of those birds must not contribute to contamination of soil or water. Producers of organic and free-range turkeys must demonstrate to the Department of Agriculture that they've allowed birds "access to the outside," though that phrase is not specifically defined and some birds may not venture outdoors.

Such steps are among the requirements for raising a food animal sustainably—without drugs and in a way that's more healthful for animals and people.

Indeed, when we focused on antibiotic use, our analysis showed that bacteria on turkey labeled "no antibiotics" or "organic" were resistant to significantly fewer antibiotics than bacteria on conventional turkey. We also found much more resistance to classes of antibiotics approved for use in turkey production than to those not approved for such use. Consumers Union, the advocacy arm of Consumer Reports, believes that the FDA should ban all antibiotics in animal production except to treat illness.

A need for stricter limits

When any food animal is slaughtered, the bacteria that normally live in its gut without causing harm can wind up on its carcass. To limit contamination, federal law requires processors to create a Hazard Analysis and Critical Control Point plan. For turkey processors, HACCP includes steps for washing and chilling carcasses throughout processing to reduce the growth of harmful bacteria and contamination of the finished product.

But HACCP doesn't require eradication of harmful bacteria. In fact, salmonella is permitted in up to half of the ground-turkey samples that the USDA's Food Safety and Inspection Service (FSIS) tests at processors' plants. And bugs that remain can keep growing until the turkey is cooked.

In 2011 Cargill Value Added Meats Retail announced two voluntary recalls of a total of 36 million pounds of conventionally raised ground turkey—among the largest recalls of poultry meat in U.S. history—due to possible contamination with a resistant strain of salmonella Heidelberg. The superbug was traced to a Cargill establishment in Springdale, Ark. In all, 136 people fell ill during that outbreak, according to the national Centers for Disease Control and Prevention, and one of those victims died.

The current salmonella standard isn't strict enough. The USDA should allow no more than 12% contamination in ground--turkey samples.

"As we've publicly stated over the past year and a half, no stone was left unturned in our efforts to determine the originating source of salmonella Heidelberg associated with the ground-turkey recalls, yet to this day we do not know the origin of the bacteria linked to outbreak of illnesses," said Mike Robach, vice president of corporate food safety and regulatory affairs for Cargill in Minneapolis. He provided a long list of steps that Cargill has taken since the outbreak to make its ground turkey safer.

In the wake of the recalls, the FSIS required all ground-poultry processors to review and update their safety procedures, paying special attention to the sanitation of equipment. The agency told us that it also plans to conduct a risk assessment of salmonella and campylobacter (another food-poisoning bacterium) in ground-turkey products. The goal: a new standard for salmonella and, possibly, campylobacter.

Eight ground-turkey samples in our tests, conducted a year after the recalls, harbored salmonella that resisted three or more antibiotic classes. One of those samples came from a package of turkey processed at Cargill's Springdale plant. It harbored a strain of salmonella Heidelberg that was not the outbreak strain but resisted the same antibiotics. Even a finding of the outbreak strain, the FSIS said, "likely would not trigger a specific follow-up action by FSIS if steps were previously taken for the affected establishment to regain control of its operations."

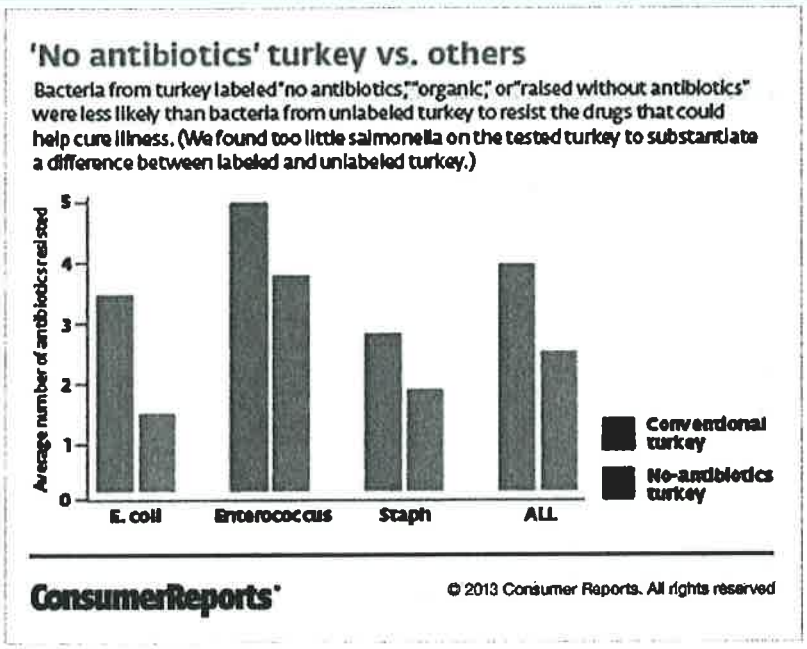
Consumers Union says the current salmonella standard isn't strict enough, and is urging the USDA to allow no more than 12 percent contamination in ground-turkey samples, a standard most of the industry already meets.

Any improvement will come too late for consumers such as Diana Goodpasture, 66, of Akron, Ohio. She was sickened with salmonella Heidelberg from ground turkey in June 2011 and was hospitalized for five days. "I've had complications ever since then," she says. "I'm still seeing a gastroenterologist. I don't know that I'll ever be well."

How resistant to antibiotics?
We determined whether samples of four bacteria isolated from our tested ground turkey could survive exposure to as many as 16 antibiotics at levels usually effective against those bugs. The antibiotics we tried differed with each bug and included ampicillin, ceftriaxone, ciprofloxacin, tetracycline, and others often used to treat the illnesses those bacteria cause. Classes are groups of similar antibiotics. Three of the 39 samples of staph aureus harbored MRSA, a potentially deadly bacterium.

Bugs immune to drugs

Bacterium	Samples tested	Resisted one or more antibiotic classes	Resisted three or more antibiotic classes
Enterococcus	178	177	144
Escherichia coli	155	135	82
Staphylococcus aureus	39	34	8
Salmonella	12	11	8



What you can do

Common slip-ups while handling or cooking ground turkey can put you at risk of illness. Although the bacteria we found are killed by thorough cooking, they can produce toxins that may not be destroyed by heat. Take the following precautions:

Slip up during handling and you risk illness.

- Buy turkey labeled "organic" or "no antibiotics," especially if it also has a "USDA Process Verified" label, which means that the USDA has confirmed that the producer is doing what it says. Organic and no-antibiotics brands in our tests were: Coastal Range Organics, Eberly, Giant Eagle Nature's Basket, Harvestland, Kosher Valley, Nature's Place, Nature's Promise, Nature's Rancher, Plainville Farms, Wegmans, Whole Foods, and Wild Harvest.
- Consider other labels, such as "animal welfare approved" and "certified humane," which mean that antibiotics were restricted to sick animals.
- Be aware that "natural" meat is simply minimally processed, with no artificial ingredients or added color. It can come from an animal that ate antibiotics daily.
- Know that no type of meat—whether turkey, chicken, beef, or pork—is risk free.
- Buy meat just before checking out, and place it in a plastic bag to prevent leaks.
- If you will cook meat within a couple of days, store it at 40° F or below. Otherwise, freeze it. (Note that freezing may not kill bacteria.)
- Cook ground turkey to at least 165° F. Check with a meat thermometer.
- Wash hands and all surfaces after handling ground turkey.
- Don't return cooked meat to the plate that held it raw.

Sickened by a turkey burger?

Hours after she grilled a turkey burger for dinner in June 2011, Diana Goodpasture, 66, of Akron, Ohio, says she felt awful. "In the middle of the night, I woke up and I was sick," she says. "I started to get an upset stomach and diarrhea, and then it just got progressively worse from there."

Goodpasture, a van driver, says she thought she'd caught a stomach flu, so she stayed home for a few days. But the gastrointestinal symptoms and crampy abdominal pain worsened. "It got so bad that my kids said, 'You have to go to the hospital,' " she recalls. Goodpasture was hospitalized at Akron General Medical Center for five days.

Tests showed that she'd fallen ill from salmonella Heidelberg. The leftover ground turkey she'd frozen after dinner also tested positive when analyzed by the Summit County Public Health Department.

Almost two years later, Goodpasture says she's still not completely well. "It has really messed up my intestinal system. And from what I can tell, that's just a lifetime thing I'm going to have to deal with," she says. "It changed my whole life."

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H

United States District Court,
W.D. Wisconsin.

John STAUBER, Glenn Stoddard, on his own behalf and as next friend of Patrick Stoddard, Ronnie Cummins, and Marilyn Charbush, Plaintiffs,
v.
Donna SHALALA, in her official capacity as Secretary of Health and Human Services, and David Kessler, M.D., in his official capacity as Commissioner of the Food and Drug Administration, Defendants,
and
Monsanto Company, Intervenor–Defendant.

No. 94–C–0090–C.
Aug. 4, 1995.

Consumers of commercially sold dairy products brought action against Secretary of Health and Human Services (HHS) and against Commissioner of Food and Drug Administration (FDA) for declaratory and injunctive relief pursuant to Food, Drug, and Cosmetic Act, National Environmental Policy Act (NEPA), and Administrative Procedure Act, challenging defendants' approval of new drug application for milk production-enhancing, synthetic bovine growth hormone drug. On cross-motions for summary judgment, the District Court, Crabb, Chief Judge, held that: (1) consumers had standing under both Food, Drug, and Cosmetic Act and NEPA; (2) FDA reached "final decision" on issue of whether to require labeling of food derived from drug-treated cows that was currently ripe for judicial review; (3) evidence which was not submitted to FDA during its review of new drug application was not admissible; (4) FDA did not act arbitrarily and capriciously in approving drug; (5) FDA did not act arbitrarily and capriciously in not requiring labeling of products derived from drug-treated cows; and (6) FDA adequately complied with NEPA in determining that environmental impact statement (EIS) was unnecessary.

Defendants' motion granted.

West Headnotes

[1] Federal Civil Procedure 170A ⚷103.2

170A Federal Civil Procedure
170AII Parties
170AII(A) In General
170Ak103.1 Standing
170Ak103.2 k. In General; Injury or Interest. Most Cited Cases

Article III standing has three components: injury or threat of injury; traceability of injury to defendant's conduct; and likelihood that favorable decision will provide plaintiff with remedy. U.S.C.A. Const. Art. 3, § 2, cl. 1.

[2] Health 198H ⚷324

198H Health
198HI Regulation in General
198HI(E) Drugs; Medical Devices and Instruments
198Hk324 k. Animal Drugs. Most Cited Cases
(Formerly 138k10 Drugs and Narcotics)

Consumers of dairy products alleging that Food and Drug Administration (FDA) failed to hold sponsor of milk production-enhancing, synthetic bovine growth hormone drug to its burden of demonstrating drug's safety alleged sufficient injury in exposure to potentially dangerous drug to confer standing to assert claim under Food, Drug and Cosmetic Act; consumers were not required to show that drug was actually harmful in order to satisfy standing requirements but, rather, under Act, any significant uncertainty regarding drug's safety was burden to be born by sponsor, not consumer. U.S.C.A. Const. Art. 3, § 2, cl. 1; Federal Food, Drug, and Cosmetic Act, §§ 1–904, as amended, 21 U.S.C.A. §§ 301–394.

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[3] Environmental Law 149E ⚷656

149E Environmental Law
149EXIII Judicial Review or Intervention
149Ek649 Persons Entitled to Sue or Seek Review; Standing
149Ek656 k. Other Particular Parties. Most Cited Cases
(Formerly 199k25.15(4.1) Health and Environment)

Consumers of dairy products satisfied requirements for Article III standing under NEPA regarding their challenge to failure of defendant agencies to conduct adequate environmental assessment (EA) or issue environmental impact statement (EIS) assessing environmental effects of approval of milk production-enhancing, synthetic bovine growth hormone drug, even absent proof that drug was actually harmful; consumers introduced evidence that drug created increased risk of mastitis that would increase drug farmers' reliance on illegal or otherwise unregulated drugs which would in turn increase levels of drug residues in consumers' milk, and consumers argued that there was risk that increased exposure to drug residues might affect human bioimmune systems and bacteria in human digestive systems. U.S.C.A. Const. Art. 3, § 2, cl. 1; National Environmental Policy Act of 1969, § 2 et seq., as amended, 42 U.S.C.A. § 4321 et seq.

[4] Administrative Law and Procedure 15A ⚷676

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(A) In General
15Ak676 k. Record. Most Cited Cases

In analyzing standing, court was able to consider evidence outside administrative record. U.S.C.A. Const. Art. 3, § 2, cl. 1.

[5] Administrative Law and Procedure 15A ⚷704

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(B) Decisions and Acts Reviewable
15Ak704 k. Finality; Ripeness. Most Cited Cases

Food 178 ⚷5

178 Food
178k5 k. Purity and Quality. Most Cited Cases
(Formerly 138k10 Drugs and Narcotics)

Food and Drug Administration (FDA) reached "final decision" on issue of whether to require labeling of food derived from cows treated with milk production-enhancing, synthetic bovine growth hormone drug, and decision was ripe for judicial review and, thus, no further exhaustion of administrative remedies was required; FDA addressed issue of whether food products derived from cows treated with drug should be labeled as such, and agency's decision not to require labeling followed a fortiori from its conclusion that it was unnecessary to establish tolerance level or withdrawal time because there was no essential difference between milk derived from animals treated with drug and regular milk. 21 C.F.R. §§ 10.25, 10.45.

[6] Administrative Law and Procedure 15A ⚷741

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(D) Scope of Review in General
15Ak741 k. In General. Most Cited Cases

Health 198H ⚷323

198H Health
198HI Regulation in General
198HI(E) Drugs; Medical Devices and Instruments
198Hk323 k. Judicial Review or Intervention. Most Cited Cases
(Formerly 138k10 Drugs and Narcotics)

Decision of Food and Drug Administration

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(FDA) to approve drug is informal agency action for purposes of judicial review.

[7] Administrative Law and Procedure 15A ⚷ 763

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(D) Scope of Review in General
15Ak763 k. Arbitrary, Unreasonable or Capricious Action; Illegality. Most Cited Cases

Informal agency action may be set aside upon judicial review only if agency's determination is arbitrary and capricious, abuse of discretion or otherwise not in accordance with law. 5 U.S.C.A. § 706(2)(A).

[8] Administrative Law and Procedure 15A ⚷ 763

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(D) Scope of Review in General
15Ak763 k. Arbitrary, Unreasonable or Capricious Action; Illegality. Most Cited Cases

Arbitrary and capricious standard of review of informal agency action is highly deferential; even if reviewing court disagrees with agency's action, court must uphold action if agency considered all relevant factors and court can discern rational basis for agency's choice. 5 U.S.C.A. § 706(2)(A).

[9] Administrative Law and Procedure 15A ⚷ 760

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(D) Scope of Review in General
15Ak754 Discretion of Administrative Agency
15Ak760 k. Wisdom, Judgment or Opinion. Most Cited Cases

When decision goes to core of agency's expertise, court must generally defer to agency's more informed judgment.

[10] Administrative Law and Procedure 15A ⚷744.1

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(D) Scope of Review in General
15Ak744 Trial De Novo
15Ak744.1 k. In General. Most Cited Cases

District court may not undertake de novo review of agency's decision and its factual underpinnings; that rule of evidence is derived from arbitrary and capricious standard itself, which requires court to ask not what it would have done if it had been in agency's place, but whether agency approached problem in right way, properly considered evidence before it and issued decision supported by record in front of it. 5 U.S.C.A. § 706(2)(A).

[11] Health 198H ⚷323

198H Health
198HI Regulation in General
198HI(E) Drugs; Medical Devices and Instruments
198Hk323 k. Judicial Review or Intervention. Most Cited Cases
(Formerly 138k10 Drugs and Narcotics)

Rule that district court may not undertake de novo review of agency's decision and its factual underpinnings applies to federal claims challenging Food and Drug Administration's (FDA) approval of new drug applications. 5 U.S.C.A. § 706(2)(A).

[12] Administrative Law and Procedure 15A ⚷676

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(A) In General
15Ak676 k. Record. Most Cited Cases

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General rule is that if piece of evidence was never introduced before administrative agency, it does not exist for purposes of appeal to district court, though exception is that reviewing court may consider evidence that is relevant to determining whether agency decision was arbitrary and capricious.

[13] Health 198H ⚷324

198H Health
198HI Regulation in General
198HI(E) Drugs; Medical Devices and Instruments
198Hk324 k. Animal Drugs. Most Cited Cases
(Formerly 138k10 Drugs and Narcotics)

Evidence tending to show that milk production-enhancing, synthetic bovine growth hormone drug might have adverse impact on human health was never submitted to Food and Drug Administration (FDA) during its review of drug application and, thus, was not admissible on judicial review.

[14] Health 198H ⚷324

198H Health
198HI Regulation in General
198HI(E) Drugs; Medical Devices and Instruments
198Hk324 k. Animal Drugs. Most Cited Cases
(Formerly 138k10 Drugs and Narcotics)

Food and Drug Administration's (FDA) approval of milk production-enhancing, synthetic bovine growth hormone drug despite its admitted risks of side effects to cows, particularly mastitis, on theory that safety risk was manageable if farmers adopted herd management techniques and ongoing herd reproductive health programs as drug label recommended, was not arbitrary and capricious; agency determined that risk of mastitis caused by drug was much less than risk caused by other variables such as seasonal change, and mastitis was health concern which was familiar to dairy farmers, who knew how to detect and treat it. Federal Food, Drug, and Cosmetic Act, § 201(u), as amended, 21 U.S.C.A. § 321(u).

[15] Health 198H ⚷324

198H Health
198HI Regulation in General
198HI(E) Drugs; Medical Devices and Instruments
198Hk324 k. Animal Drugs. Most Cited Cases
(Formerly 138k10 Drugs and Narcotics)

Food and Drug Administration's (FDA) approval of milk production-enhancing, synthetic bovine growth hormone drug was not arbitrary and capricious, despite claim that FDA did not adequately consider risk of higher levels of antibiotic drug residues in milk as consequence of treatment of cows for mastitis caused by drug; FDA determined that increased risk of mastitis was not overly great and, consequently, that rise in use of antibiotics would also not be overly great, and given those conclusions, FDA rationally based its determination of safety on current milk purety regulatory scheme, which tested milk for drugs most commonly used to treat mastitis. Federal Food, Drug, and Cosmetic Act, § 512(d)(2), as amended, 21 U.S.C.A. § 360b(d)(2); 21 C.F.R. § 514.111(a)(4).

[16] Health 198H ⚷324

198H Health
198HI Regulation in General
198HI(E) Drugs; Medical Devices and Instruments
198Hk324 k. Animal Drugs. Most Cited Cases
(Formerly 138k10 Drugs and Narcotics)

Food and Drug Administration's (FDA) approval of milk production-enhancing, synthetic bovine growth hormone drug was not arbitrary and capricious, despite claim that FDA failed to adequately explore potential risks associated with increased level of insulin-like growth factor (IGF–1) in milk from cows treated with drug; drug sponsor's two-week rat study indicated no adverse effects

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from oral ingestion of IGF–1, and other evidence indicated that IGF–1 levels rose only slightly when producing cow was treated with drug, that IGF–1 existed in human blood stream at levels much higher than those appearing in milk, and that IGF–1 was denatured when milk was boiled. Federal Food, Drug, and Cosmetic Act, § 512(d)(2), as amended, 21 U.S.C.A. § 360b(d)(2); 21 C.F.R. § 514.111(a)(4).

[17] Food 178 ⚷5

178 Food
178k5 k. Purity and Quality. Most Cited Cases
(Formerly 138k10 Drugs and Narcotics)

Dairy product consumers failed to establish that Food and Drug Administration (FDA) acted arbitrarily and capriciously in failing to require that food products derived from cows treated with milk production-enhancing, synthetic bovine growth hormone drug be labeled as such, particularly as consumers were unable to point to evidence in administrative record indicating that milk derived from cows treated with drug had performance characteristics or organoleptic properties different from milk from untreated cows. Federal Food, Drug, and Cosmetic Act, §§ 201(n), 403(a)(1), as amended, 21 U.S.C.A. §§ 321(n), 343(a)(1).

[18] Food 178 ⚷5

178 Food
178k5 k. Purity and Quality. Most Cited Cases
(Formerly 138k10 Drugs and Narcotics)

Consumer opinion, by itself, could not suffice to require labeling of food products derived from cows treated with milk production-enhancing, synthetic bovine growth hormone drug; while Food and Drug Administration (FDA) did consider consumer opinion relevant when determining whether label was required to disclose material fact, factual predicate to requirement of labeling was determination that product differed materially from type of product it purported to be. Federal Food, Drug, and Cosmetic Act, §§ 201(n), 403(a)(1), as amended, 21 U.S.C.A. §§ 321(n), 343(a)(1).

[19] Environmental Law 149E ⚷595(1)

149E Environmental Law
149EXII Assessments and Impact Statements
149Ek584 Necessity for Preparation of Statement, Consideration of Factors, or Other Compliance with Requirements
149Ek595 Particular Projects
149Ek595(1) k. In General. Most Cited Cases
(Formerly 199k25.10(2.1) Health and Environment)

Socioeconomic effects on dairy farmers of milk production-enhancing, synthetic bovine growth hormone drug did not require Food and Drug Administration (FDA) to prepare environmental impact statement (EIS) under NEPA; it was not claimed that socioeconomic effects of drug would cause secondary environmental effects to such degree as to require preparation of EIS but, rather, it was claimed only that drug would cause both environmental and socioeconomic harms, which assertion was insufficient to satisfy "interrelatedness" requirement of NEPA regulation. National Environmental Policy Act of 1969, § 102, as amended, 42 U.S.C.A. § 4332; 40 C.F.R. § 1508.14.

[20] Environmental Law 149E ⚷600

149E Environmental Law
149EXII Assessments and Impact Statements
149Ek598 Adequacy of Statement, Consideration, or Compliance
149Ek600 k. Consideration and Disclosure of Effects. Most Cited Cases
(Formerly 199k25.10(6.1) Health and Environment)

Although environmental impact statement (EIS) must discuss economic or social effects of proposed action to extent those effects interrelate to its natural or physical environmental effects, NEPA regulations do not contemplate independent consideration of socioeconomic effects when there is no determination that proposed agency activity will significantly affect environment. National Environmental Policy Act of 1969, § 102, as amended, 42

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U.S.C.A. § 4332; 40 C.F.R. § 1508.14.

[21] Environmental Law 149E ⚷600

149E Environmental Law
149EXII Assessments and Impact Statements
149Ek598 Adequacy of Statement, Consideration, or Compliance
149Ek600 k. Consideration and Disclosure of Effects. Most Cited Cases
(Formerly 199k25.10(6.1) Health and Environment)

Under NEPA regulation, it is only after agency determines that socioeconomic impact of proposed agency action is likely to cause environmental harms that agency needs to discuss socioeconomic effects in environmental impact statement (EIS). National Environmental Policy Act of 1969, § 102, as amended, 42 U.S.C.A. § 4332; 40 C.F.R. § 1508.14.

[22] Environmental Law 149E ⚷604(1)

149E Environmental Law
149EXII Assessments and Impact Statements
149Ek598 Adequacy of Statement, Consideration, or Compliance
149Ek604 Particular Projects
149Ek604(1) k. In General. Most Cited Cases
(Formerly 199k25.10(6.1) Health and Environment)

In order to comply with NEPA in connection with approval of milk production-enhancing, synthetic bovine growth hormone drug, Food and Drug Administration (FDA) could rely on safety evaluations it made pursuant to its statutory duties under Food, Drug, and Cosmetic Act. National Environmental Policy Act of 1969, § 102, as amended, 42 U.S.C.A. § 4332; Federal Food, Drug, and Cosmetic Act, §§ 1–904, as amended, 21 U.S.C.A. §§ 301–394; 40 C.F.R. § 1506.4.

[23] Environmental Law 149E ⚷583

149E Environmental Law
149EXII Assessments and Impact Statements
149Ek580 Preliminary Assessment or Report
149Ek583 k. Sufficiency. Most Cited Cases
(Formerly 199k25.10(6.1) Health and Environment)

Environmental Law 149E ⚷604(1)

149E Environmental Law
149EXII Assessments and Impact Statements
149Ek598 Adequacy of Statement, Consideration, or Compliance
149Ek604 Particular Projects
149Ek604(1) k. In General. Most Cited Cases
(Formerly 199k25.10(6.1) Health and Environment)

Failure of Food and Drug Administration (FDA) to reference health and safety analyses in environmental assessment (EA) or finding of no significant impact (FONSI) regarding milk production-enhancing, synthetic bovine growth hormone drug did not undermine adequacy of conclusions reached in those documents, as record revealed that FDA had done those analyses. National Environmental Policy Act of 1969, § 102, as amended, 42 U.S.C.A. § 4332; 40 C.F.R. § 1506.4.

[24] Environmental Law 149E ⚷604(1)

149E Environmental Law
149EXII Assessments and Impact Statements
149Ek598 Adequacy of Statement, Consideration, or Compliance
149Ek604 Particular Projects
149Ek604(1) k. In General. Most Cited Cases
(Formerly 199k25.10(8) Health and Environment)

Opponents of Food and Drug Administration's (FDA) approval of milk production-enhancing, synthetic bovine growth hormone drug failed to show that FDA was made aware of possible alternatives relating to lower dosages or making drug available only by prescription and, thus, opponents could not

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challenge on judicial review FDA's failure to consider those alternatives.

[25] Environmental Law 149E ⚷595(1)

149E Environmental Law
149EXII Assessments and Impact Statements
149Ek584 Necessity for Preparation of Statement, Consideration of Factors, or Other Compliance with Requirements
149Ek595 Particular Projects
149Ek595(1) k. In General. Most Cited Cases
(Formerly 199k25.10(8) Health and Environment)

Even assuming that opponents of Food and Drug Administration's (FDA) approval of milk production-enhancing, synthetic bovine growth hormone drug adequately presented alternative of delayed approval pending further research into health and safety, so as to require FDA to consider proposal, opponents would not have met burden of showing that environmental impact statement (EIS) should have been prepared under NEPA, as they failed to establish existence of any unresolved conflict concerning use of available resources; proposed alternative did not involve "available resource" within meaning of NEPA section under which, if agency determines that proposed action will not significantly affect environment, it is required to consider alternatives only when proposal involves unresolved conflicts concerning alternative uses of available resources. National Environmental Policy Act of 1969, § 102, as amended, 42 U.S.C.A. § 4332.

***1182** Jacqueline H. Eagle,Office of Consumer Litigation, Washington, DC, for Donna Shalala.

Leslie Kux, Assoc. Chief Cnsl. for Veterinary Medicine, Office of the General Counsel, Rockville, MD, for David Kessler.

Michael L. Zaleski, Quarles & Brady, Madison, WI, for Monsanto Co. (Intervenor).

OPINION AND ORDER

CRABB, Chief Judge.

This is a civil action for declaratory and injunctive relief brought pursuant to the Food, Drug, and Cosmetic Act, 21 U.S.C. §§ 301–394, the National Environmental Policy Act, 42 U.S.C. §§ 4321 – 4370d, and the Administrative Procedure Act, 5 U.S.C. §§ 500–706. Plaintiffs are American consumers of commercially sold dairy products. Defendants are Donna Shalala, Secretary of the Department of Health and Human Services, and Dr. David Kessler, Commissioner of the Food and Drug Administration. Plaintiffs challenge defendants' approval of intervenor-defendant Monsanto Company's new drug application for Posilac®, a milk production-enhancing, synthetic bovine growth hormone drug. Specifically, plaintiffs contend that: 1) the approval was arbitrary and capricious because the FDA failed to consider health and safety issues related to the use of Posilac; 2) defendants failed to require mandatory labeling of products from cows treated with Posilac; and 3) defendants failed to conduct an adequate environmental assessment or issue an environmental impact statement assessing the environmental effects of Posilac's approval. Plaintiffs request both a declaration under 28 U.S.C. § 2201 and Fed.R.Civ.P. 57 that defendants failed to perform their statutory duties in approving Posilac and a permanent injunction suspending ***1183** the approval of Posilac until defendants comply with their statutory obligations.

The case is before the court on the parties' cross-motions for summary judgment. After a close review of the parties' submissions, I find that plaintiffs have offered no admissible, relevant evidence putting any material facts into dispute. Plaintiffs have not shown that defendants acted arbitrarily and capriciously in approving Posilac or in declining to require product labeling and they have not shown that defendants' environmental assessment was inadequate. Therefore, plaintiffs' claims must be dismissed.

From the proposed findings of fact of the

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parties, I find that the following material facts are undisputed.

UNDISPUTED FACTS

Bovine somatotrophin (bST), a bovine growth hormone, is a naturally occurring protein hormone produced in the pituitary gland of all cattle. In the 1930s, scientists discovered that injecting dairy cows with bovine growth hormone from other cattle could increase the cows' milk production but the discovery was not pursued on a wide scale because extraction of the hormone from cattle was not cost effective. In the 1980s, however, scientists developed a synthetic recombinant bovine growth hormone. Scientists can now isolate the gene responsible for natural bovine growth hormone, transfer that genetic material into bacterial cells called a "recombinant fermentation organism" and "program" the bacterial cells to produce a synthetic version of the hormone.

In the early 1980s, the FDA approved intervenor-defendant Monsanto Company's investigative new animal drug application for Posilac, a synthetic recombinant bovine somatotrophin. In 1987, Monsanto submitted a new animal drug application for Posilac to the FDA. Over the next several years, Monsanto supported the application with studies and reports documenting the safety and effectiveness of the drug. After reviewing those materials, the FDA approved Monsanto's application for the subcutaneous (injectable) use of Posilac on November 5, 1993. Posilac is the first genetically engineered animal drug to be approved for use in dairy cows and the first milk production enhancement drug to be approved for sale by the FDA.

The FDA approved Posilac despite criticism that the drug would have a significant negative effect on the health of dairy cows and despite concern about potential negative health effects on human consumers of dairy products derived from cows treated with rbST. Scientists, economists, farmers, and environmental and animal welfare organizations have questioned the safety and quality of rbST-derived products. In addition, the FDA received thousands of letters from consumers asking it either to deny approval of rbST or to require labeling of rbST-derived products. The General Accounting Office advised the FDA to withhold approval of Posilac until further research of rbST's potential negative impact on human health could be conducted. After the FDA approved Posilac for marketing, Congress delayed sale of the drug for 90 days while an inter-agency task force supervised by the Office of the President reviewed the data upon which the FDA based its decision. In January 1994, the task force concluded that the FDA's position was adequately supported. The FDA made available to the public a summary of the safety and effectiveness data submitted by Monsanto on which the agency relied in approving Posilac for mass marketing.

A. *Cow Safety*

Use of Posilac may affect cows adversely in several ways. Posilac increases the risks of reduced pregnancy rates, ovarian cysts and uterine disorders, decreased lengths of gestation periods and lower birth weight of calves. Posilac increases the risk of retained placentas and twinning rates in cows. It may cause increased bovine body temperatures, indigestion, bloating, diarrhea, enlarged hocks, enlarged lesions and injection site swellings. Additionally, use of Posilac increases the risk of clinical and subclinical mastitis, a bacterial infection of the udder. In absolute terms, rbST increases the risk of mastitis by about 0.1 case per cow per year. This risk is less than the risk of mastitis posed by seasonal change.

***1184** Before approving Posilac, the FDA reviewed the data submitted by Monsanto as part of its new drug application and considered Posilac's effects on animal health, including: 1) the acute and chronic toxicity of the drug; 2) its effects on reproduction; 3) calf birth traits, growth and health; 4) increased incidence of mastitis; 5) musculoskeletal effects; 6) digestive disorders including indigestion, bloating and diarrhea; 7) injection site reactions; 8) nutrient intake, body weight and body condition; 9)

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general cow health; and 10) miscellaneous health variables, including circulating anti-somatotrophin binding, blood variables, body temperature and urinalysis results. The agency determined that the risks to cows associated with the use of Posilac could be managed properly under a "manageable risk" criteria and that the risks to animal health were not significant enough to warrant denial of the drug application. (The FDA has never applied a zero risk standard when assessing the safety of new animal drugs.) Monsanto conducted a 14–day drug tolerance study that involved injecting a herd with dosages of rbST up to thirty times the normal dosage. Analysis of both cow and fetal blood and tissue revealed only one health side effect: slight swelling at the injection site.

B. *Human Consumer Safety*

Before approving Posilac, the FDA considered Posilac's possible negative effects on human health, including the possible effects of 1) increased levels of rbST in milk; 2) increased levels of insulin growth factor in milk; and 3) increased amounts of antibiotic drug residues in milk.

1. *RbST*

BST and its synthetic counterpart rbST are protein hormones that are orally inactive in humans. Upon ingestion, protein hormones (unlike steroid hormones) are broken down by enzymes in the intestines and digested. BST and rbST are orally inactive in cows as well. Like insulin, which must be injected to take effect, bST and rbST must be injected to stimulate milk production in cows. Even if injected into humans, however, rbST would not stimulate growth because human somatotrophin has a significantly different amino acid sequence from that of rbST and human receptors will not bond with rbST. Furthermore, heat destroys rbST, so that pasteurizing milk and cooking meat would tend to destroy at least 90% of the rbST in milk or beef. The FDA found that even at exaggerated doses the ingestion of rbST poses no significant risk to human safety.

2. *Mastitis and antibiotics*

Antibiotics are used to treat bovine mastitis. Trace residues of the antibiotics can appear in the milk of dairy cows. The level of antibiotic residue in milk is regulated, however. Forty-nine states have adopted the Grade A Pasteurized Milk Ordinance, established by the FDA and the Public Health Service in cooperation with state and local regulatory agencies and members of the milk industry. The ordinance defines standards for milk purity, establishes standards for production of pasteurized milk and milk products, details the method of inspections of farms and processing plants and provides that only producers, haulers, processors and distributors who meet the requirements of the ordinance shall be given permits. Under the milk ordinance, milk that is inspected and found to contain drug residues in excess of the standard must be discarded and the responsible producer is subject to regulatory sanctions.

Although states test milk routinely for drug residues in accordance with the milk ordinance, they generally test only for the presence of four of the antibiotics most commonly used to treat bovine infection, the beta-lactams, which are penicillin-like antibiotics. It has been estimated, however, that over fifty different drugs are used to treat bovine infections, some not approved for use on dairy cows, and the presence of residues from these other drugs would go undetected by most current testing procedures. The General Accounting Office has concluded that there is currently no means of assessing the degree to which current milk supplies are contaminated by these other drugs. One concern surrounding Posilac is that its use will increase the frequency of bovine infection, particularly mastitis, which will in turn ***1185** lead to an increased need for antibiotics to treat dairy cow infections. Because the current regulatory scheme does not detect the presence of all drug residues in dairy products, there is a risk that greater amounts of antibiotic drug residue will be ingested by human dairy consumers.

To date there have been no long term studies of

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the impact on human health of increased antibiotics in milk. However, the FDA determined that the increased risk of bovine mastitis caused by Posilac did not present a risk to human health because 1) the increased risk of mastitis from the use of Posilac is not great, and in fact is much lower than the increased risk caused by the many other factors that contribute to mastitis; 2) milk is tested for beta-lactam drugs, and any milk found to contain illegal residues is discarded; and 3) the beta-lactams are the most commonly used antibiotics to treat mastitis. The FDA and its Veterinary Medicine and Food Advisory Committees determined that state and local regulation of milk production and distribution ensures that milk is free from the most widely used antibiotics and that introduction of Posilac to the market would not cause a statistically significant increase in the amount of antibiotic residues found in milk.

3. *Somatic cell count*

Mastitis brings with it an increase in the amount of somatic cells (i.e., white blood cells) present in dairy milk. Studies by Monsanto showed a significant increase in the somatic cell count in milk from rbST-treated cows in some herds, although the increase was not found in all herds studied. When the various studies conducted by Monsanto on somatic cell count were pooled, the results demonstrated no significant increase in somatic cell counts attributable to rbST treatment. The FDA did not consider somatic cell count from the standpoint of human safety. However, the agency did conclude from Monsanto's studies that rbST did not increase somatic cell count any more than factors such as lactation stage and cow parity. (Cow "parity" is a term that refers to whether and how many times a cow has given birth.)

4. *Insulin-like growth factor*

Insulin-like growth factor (IGF–1) is protein hormone whose production is regulated at least in part by somatotrophin. It has the same biochemical composition in humans and cows and is present in all milk, human saliva and human digestive juices. RbST increases the amount of IGF–1 in milk. IGF–1 is denatured in the process of making baby formula, but it is not destroyed by pasteurization.

At the time Monsanto filed its new drug application for Posilac, not much was known about the hormone. Defendants have done no long term studies on the effects of increased levels of IGF–1 on human health. However, Monsanto did conduct a two week study of rats administered IGF–1 either by gavage (forced feeding) or systemically by implanted pump. The study indicated no negative health impact on the esophagus, stomach and intestines of the rats from increased levels of IGF–1 administered orally.

The FDA considered IGF–1 when it evaluated the safety and effectiveness of Posilac and concluded that any increase in IGF–1 levels posed no significant health risks to consumers. This conclusion was based on the FDA's determinations that: 1) IGF–1 levels in milk from rbST-treated cows were not significantly higher than milk from untreated cows; 2) IGF–1 was not orally active; 3) even if IGF–1 from milk was absorbed intact, levels of IGF–1 in the human bloodstream are so much higher (100 to 1000 times) than the levels found in cows' milk that the addition of small amounts of IGF–1 from cows' milk would be physiologically insignificant; and 4) the manufacturing process for infant formula denatures almost all of the IGF–1 in cows' milk. The agency concluded that IGF–1 was unlikely to affect either the gastrointestinal track of adults or infants in general.

C. *Labeling*

The FDA determined that the risks of Posilac to dairy cows could be addressed adequately by labeling the drug itself. The Posilac label contains a "precautions and side-effects" section that lists the potential ***1186** adverse effects on cows, including reduced pregnancy rates, cystic ovaries, disorders of the uterus, decreases in length of gestation, increased twinning rates, decreased calf birth weight, an increased risk of clinical and subclinical mastitis, digestive disorders and infection site reactions.

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In bold letters, the warning section informs the dairy farmer that "[u]se of Posilac should be preceded by implementation of a comprehensive and ongoing herd reproductive health program," and "[m]astitis management practices should be thoroughly evaluated prior to initiating use of Posilac."

The FDA considered whether special labeling should be required for milk and milk products derived from rbST-treated cows in addition to the drug's packaging label. In May 1993, the FDA's Veterinary Medicine and Food Advisory Committees held a meeting to address the issue. The committees received testimony from doctors, scientists, dietitians, dairy farmers, veterinarians, members of medical and scientific organizations and universities, dairy organizations and farm and agricultural groups. On the basis of testimony from the hearings and the data submitted by Monsanto, the FDA concluded that there is no significant difference between milk from cows treated with Posilac and milk from untreated cows. The agency concluded also that rbST had no significant effect on the organoleptic properties of milk or on the lactose, fat, protein, ash, phosphorous and vitamin content of milk. On February 3, 1994, the FDA issued interim guidance on voluntary labeling of milk from untreated cows, concluding that such milk cannot be labeled as "BST free" because BST occurs naturally in milk, but that farmers may label their milk "from cows not treated with rbST," if the statement is placed in proper context. 59 Fed.Reg. 6279–80 (February 10, 1994).

D. *Environmental Issues*

The FDA approved Monsanto's new drug application for Posilac without preparing an environmental impact statement, concluding that no statement was necessary because approval of Posilac would not have a significant impact on the environment within the meaning of the National Environmental Policy Act. The FDA based this conclusion on an environmental assessment prepared by Monsanto that addressed Posilac's potential impact on the environment.

The FDA assumes responsibility for the scope and content of the environmental assessment prepared by Monsanto. Agency officials have reviewed the information contained in that document. The environmental assessment refers to studies that evaluated the impact Posilac was likely to have on the dairy industry and concluded that its introduction to the market would not do fundamental damage to current structural trends. The environmental assessment addressed the possibility of shifts in land use patterns as a result of the use of Posilac, concluding that the drug would be unlikely to have any significant effect on land use. The assessment also addressed two alternatives to the current approval of Posilac: 1) additional controls on production; and 2) use of the drug, including labeling. Both alternatives were addressed only with regard to the environmental concerns surrounding the biotechnological aspects of the drug's preparation.

Neither the environmental assessment nor the finding of no significant impact addressed consumer health risks posed by increased IGF–1 levels and antibiotic residue levels in milk derived from rbST-treated cows, the impact of Posilac on the health of dairy cows or the potential risks to consumers caused by increases in IGF–1 and antibiotic residues. However, the agency's policy is not to reexamine issues under the National Environmental Policy Act already considered as part of its evaluation of a new animal drug application. The assessment failed to address the impact of Posilac on family dairy farms. Finally, the environmental assessment did not address possible alternatives of 1) approving the drug at lower doses; 2) approving Posilac only as a prescription drug; or 3) approving the drug for use only when accompanied by detailed instructions or educational seminars regarding methods to minimize health risks.

OPINION

A. *Standing*

[1] In their motion for summary judgment, defendants challenge plaintiffs' standing***1187** under both the Food, Drug, and Cosmetic Act and the Na-

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tional Environmental Policy Act. The constitutional requirements for standing derive from Article III's mandate that federal jurisdiction extends only to those situations in which plaintiffs can demonstrate a "case or controversy" between themselves and the defendant. Article III standing has three components: 1) an injury or threat of injury; 2) traceability of the injury to the defendant's conduct; and 3) the likelihood that a favorable decision would provide the plaintiff with a remedy. *Lujan v. Defenders of Wildlife,* 504 U.S. 555, 560–61, 112 S.Ct. 2130, 2136, 119 L.Ed.2d 351 (1992). Defendants dispute whether plaintiffs can satisfy the first element of the test. To do so, plaintiffs must allege injuries or threatened injuries that are "concrete and particularized" and show that they have "an actual stake in the outcome [of the case] that goes beyond intellectual or academic curiosity." *Family & Children's Ctr. v. School City,* 13 F.3d 1052, 1058 (7th Cir.1994) (quoting *South East Lake View Neighbors v. Dept. of Housing and Urban Development,* 685 F.2d 1027, 1033 (7th Cir.1982)); *see also Schmidling v. City of Chicago,* 1 F.3d 494, 498 (7th Cir.1993) (injury or threat "must be both real and immediate, not conjectural or 'hypothetical' "), *cert. denied,* 510 U.S. 994, 114 S.Ct. 555, 126 L.Ed.2d 456 (1993). At the summary judgment stage, standing requires "a factual showing of perceptible harm." *Lujan,* 504 U.S. at 566, 112 S.Ct. at 2139. However, alleged injuries need not be particularly severe or costly: "even a minor or noneconomic injury will satisfy the strictures of Article III," *Family & Children's Ctr.,* 13 F.3d at 1058, and "even a small probability of injury is sufficient to create a case or controversy—to take a suit out of the category of the hypothetical...." *Village of Elk Grove Village v. Evans,* 997 F.2d 328 (7th Cir.1993).

1. *Standing under the Food, Drug, and Cosmetic Act*

[2] Defendants raised their standing argument once before in this litigation in a motion to dismiss. In an opinion and order entered September 1, 1994, I concluded that standing could be premised on plaintiffs' allegations that they were unable to consume dairy products known to be free of milk from rbST-treated cows. Defendants do not challenge plaintiffs' alleged inability to consume milk products known to be free of milk from rbST-treated cows. Rather, they attack the minor premise of plaintiffs' allegation, that consuming dairy products derived from rbST treated cows is harmful. This argument misconstrues plaintiffs' rights under the Food, Drug, and Cosmetic Act.

The federal Food, Drug, and Cosmetic Act, 21 U.S.C. §§ 301–394, is intended to protect American consumers from the risks of consuming unsafe or ineffective food and drugs and thus requires new drug applicants to demonstrate the safety and effectiveness of new drugs before they may be marketed. One aspect of plaintiffs' challenge to the FDA's approval of rbST is that the agency did not hold Monsanto to its burden under the act of demonstrating the safety of Posilac. If this allegation is true, plaintiffs' injury is their exposure to a potentially dangerous drug whose safety has not been demonstrated in accordance with the act. *Cutler v. Kennedy,* 475 F.Supp. 838, 848–49 (D.C.Cir.1979), *overruled on other grounds in Chaney v. Heckler,* 718 F.2d 1174, 1188 n. 35 (D.C.Cir.1983).

"[Defendants'] suggestion that [plaintiffs] lack standing because the injury they allege is speculative confuses the anticipated ... consequences of the [agency action] with the ... injury [plaintiffs] actually claim." *Florida Audubon Society v. Bentsen,* 54 F.3d 873, 879 (D.C.Cir.1995). Contrary to defendants' theory, plaintiffs need not show that rbST is actually harmful in order to satisfy the requirements of standing. The Food, Drug, and Cosmetic Act creates legal rights or interests for consumers, " 'the invasion of which creates standing, even though no injury would exist without the statute.' " *Cutler,* 475 F.Supp. at 848 (quoting *Linda R.S. v. Richard D.,* 410 U.S. 614, 617 n. 3, 93 S.Ct. 1146, 1148 n. 3, 35 L.Ed.2d 536 (1973)). Because the act places the responsibility on the sponsor of the drug to

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demonstrate the drug's safety and directs the FDA to approve for marketing only those drugs whose safety has been demonstrated, any significant uncertainty regarding the drug's safety is a ***1188** burden to be borne by the sponsor, not the consumer. If the FDA has failed to follow the dictates of the act, as plaintiffs allege, it has shifted the costs of uncertainty from the sponsor of the drug to the American consumer. This increased risk of potential harm that the consumer must bear is an injury in fact for standing purposes.

2. *Standing under the National Environmental Policy Act*

[3] To have standing under the National Environmental Policy Act, 42 U.S.C. §§ 4321–4370d, plaintiffs must show that an agency's alleged noncompliance with the act has adversely affected them and that they are within the zone of interests protected by the act. Under the act, individuals are aggrieved by an agency's failure to prepare an environmental impact statement if they can show that the failure creates a reasonable risk that " 'environmental impacts will be overlooked' " and that they have a "sufficient geographical nexus to the site of the challenged project that [they] may be expected to suffer whatever environmental consequences the project may have." *Florida Audubon Society v. Bentsen,* 54 F.3d at 877 (quoting *City of Davis v. Coleman,* 521 F.2d 661, 671 (9th Cir.1975)).

Defendants contend that plaintiffs have failed to allege an injury cognizable under the National Environmental Policy Act and have made no showing of a sufficient nexus between the agency's decision not to prepare an environmental impact statement and the alleged harm. Defendants do not challenge plaintiffs' allegations that they are consumers of milk. Rather, defendants' challenge assumes that plaintiffs must prove that rbST is actually harmful. This assumption is flawed, however, because it collapses the standing inquiry into the merits of plaintiffs' claims.

[4] Plaintiffs have introduced evidence tending to show that rbST creates an increased risk of mastitis that will increase dairy farmers' reliance on antibiotics in the treatment of their dairy cows. Plaintiffs offer additional evidence that over 50 drugs are used to treat infections in cows, only 4 of which are seriously regulated. (I note that in analyzing standing, I am able to consider evidence that is outside the administrative record and for that reason may not be considered when assessing plaintiffs' claims of violations of the Food, Drug, and Cosmetic. *See infra,* section C.) For standing purposes, I conclude that this evidence demonstrates a reasonable risk that 1) farmers will rely increasingly on illegal or otherwise unregulated drugs to treat the higher incidence of mastitis, which in turn will 2) increase the levels of drug residues that might show up in consumers' milk. Plaintiffs argue that there is a risk that increased exposure to drug residues may affect human bioimmune systems and the bacteria living in our digestive systems. Whether plaintiffs are likely to succeed on this claim does not determine whether they have standing under the National Environmental Policy Act. The evidence they have proffered demonstrates a reasonable risk of serious environmental harm caused by the proposed agency action that would clearly affect them as dairy product consumers, were it ever to come to fruition. Therefore, I conclude that the consumer plaintiffs satisfy the requirements for Article III standing under the National Environmental Policy Act.

B. *Exhaustion*

[5] Defendants contend that plaintiffs have failed to exhaust their administrative remedies with respect to their labeling claim. Under FDA regulations, the secretary's decisions on new drug applications constitute final agency action for purposes of exhaustion. 21 C.F.R. §§ 10.25 and 10.45. Defendants do not argue that the agency's decision to approve Posilac was not final; rather, it appears that they consider the decision on labeling outside the scope of the agency's decision to approve Posilac, at least for exhaustion purposes. They assert that plaintiffs could have requested the agency to review

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its decision that labeling rbST-derived dairy products was not necessary by filing a citizen petition pursuant to 21 C.F.R. § 10.25 and they argue that an administrative ruling on such a petition would provide a reviewing court with a "better" record on the need for labeling, because the agency considered the issue only "informally" when it approved Posilac***1189** for marketing. Defendants note that none of the plaintiffs have filed a petition under 21 C.F.R. §§ 10.25 or 10.30 requesting the FDA to require labeling of food derived from rbST-treated cows.

Defendants' argument has some merit. Ordinarily, FDA review of new animal drug applications does not entail consideration whether food products derived from animals treated with the new drug should be labeled. It does not appear that any statute or regulation requires a determination of the question. Where new animal drug applications are concerned, usually the relevant focus is on proposed tolerance levels and withdrawal periods to assure that no residues from the animal drug make their way into animal products intended for human consumption. *See* 21 U.S.C. § 360b. Here, however, the FDA addressed the issue whether food products derived from cows treated with rbST should be labeled as such. After publishing notice in the federal register, 58 Fed.Reg. 21314 (April 20, 1993), the agency held a two-day meeting in May 1993 to receive oral and written testimony on the issue. Defts' Mem.Ex. 13 Vol. XVII. Andrew Kimbrell testified at the hearing on behalf of the Coalition for Responsible Technology, a Wisconsin group founded by plaintiff Stauber. On May 7, 1993, the agency's Food Advisory Committee and the Veterinary Medicine Advisory Committee deliberated the labeling issue. Defts' Mem.Ex. 13, Vol. XVIII. A final conclusion from the agency on the need to label food products does not appear in the conclusions section of the freedom of information summary, Defts' Exh. 1 Vol. I at 121–22. However, the agency's decision not to require labeling flowed *a fortiori* from its conclusion that it was unnecessary to establish a tolerance level or withdrawal time because there is no essential difference between milk derived from rbST-treated animals and regular milk. From a review of the administrative record, I conclude that the agency reached a final decision on the issue whether to require labeling of food derived from rbST-treated cows that is currently ripe for judicial review.

C. *Standard of Review and Evidentiary Issues*

[6][7][8][9] The decision of the FDA to approve a drug is an informal agency action. *Scott v. Food and Drug Administration,* 728 F.2d 322, 324 (6th Cir.1984); *Upjohn Mfg. Co. v. Schweiker,* 681 F.2d 480, 483 (6th Cir.1982). Federal court review of informal agency action is limited in scope: it may be set aside only if the agency's determination is arbitrary and capricious, an abuse of discretion or otherwise not in accordance with the law. *Upjohn Mfg. Co. v. Schweiker,* 681 F.2d at 483; 5 U.S.C. § 706(2)(A). The arbitrary and capricious standard is highly deferential: even if a reviewing court disagrees with an agency's action, the court must uphold the action if the agency considered all relevant factors and the court can discern a rational basis for the agency's choice. *Camp v. Pitts,* 411 U.S. 138, 143, 93 S.Ct. 1241, 1244, 36 L.Ed.2d 106 (1973); *Citizens to Preserve Overton Park v. Volpe,* 401 U.S. 402, 415–16, 91 S.Ct. 814, 823–24, 28 L.Ed.2d 136 (1971), *overruled on other grounds in Califano v. Sanders,* 430 U.S. 99, 97 S.Ct. 980, 51 L.Ed.2d 192 (1977). Moreover, when a decision goes to the core of an agency's expertise, generally the court must defer to the agency's more informed judgment. *International Fabricare Institute v. U.S.E.P.A.,* 972 F.2d 384, 389 (D.C.Cir.1992) ("The rationale for deference is particularly strong when the [agency] is evaluating scientific data within its technical expertise."); *Tri–Bio Laboratories, Inc. v. United States,* 836 F.2d 135, 142 (3d Cir.1987) ("[I]n evaluating scientific evidence in the drug field, the FDA possesses an expertise entitled to respectful consideration by th[e] court") (citing *Weinberger v. Bentex Pharmaceuticals, Inc.,* 412 U.S. 645, 653–54, 93 S.Ct. 2488, 2494, 37 L.Ed.2d 235 (1973)), *cert. denied,* 488 U.S. 818,

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109 S.Ct. 57, 102 L.Ed.2d 35 (1988).

[10][11] The Supreme Court has made clear that courts are precluded both from considering evidence that the agency never had a chance to review and from creating a record different from that considered by the agency. *Camp v. Pitts,* 411 U.S. at 142, 93 S.Ct. at 1244; *see also Edwards v. United States Dept. of Justice,* 43 F.3d 312, 314 (7th Cir.1994); *Cronin v. United States Dept. of Agriculture,* 919 F.2d 439, 443–44 (7th Cir.1990). The district court may not undertake ***1190** a de novo review of the agency's decision and its factual underpinnings. *Cronin,* 919 F.2d at 444 ("only in an emergency should a reviewing court ... conduct its own evidentiary hearing" in a review of agency action). This rule of evidence is derived from the arbitrary and capricious standard itself, which requires the court to ask not what it would have done if it had been in the agency's place, but rather whether the agency approached the problem in the right way, properly considered the evidence before it and issued a decision supported by the record in front of it. *Bradley v. Weinberger,* 483 F.2d 410, 414–15 (1st Cir.1973) (district court erred in considering affidavits submitted by the parties in a case challenging an FDA determination on labeling; review was limited to the administrative record). This rule is fully applicable to federal claims challenging the FDA's approval of new drug applications. *See Upjohn Mfg. Co. v. Schweiker,* 681 F.2d at 483.

[12] The agency review is like a trial in a district court: it is supposed to be the main event. Plaintiffs challenging an agency action do not advance their cause by submitting to the reviewing court evidence that could have been presented to the agency but never was. Just as in an appeal from a district court trial, the rule is that if a piece of evidence was never introduced, for purposes of appeal, it does not exist. The one exception is that a reviewing court may consider evidence that is relevant to determining whether the agency decision was arbitrary and capricious. *See Overton Park,* 401 U.S. at 420–21, 91 S.Ct. at 825–26 (exception to rule limiting judicial review of agency action to administrative record made where supplemental evidence would explain process by which agency made its determination).

[13] Plaintiffs have submitted an assortment of evidence, including affidavits and other evidence tending to show that rbST may have an adverse impact on human health. Because none of this evidence was ever submitted to the FDA during its review of the Posilac application, none of it is admissible in this proceeding. Plaintiffs cannot ask this court to rely on opinions within the medical community regarding health risks posed by rbST without first establishing that those opinions were presented to the FDA before it granted approval of Posilac.

Plaintiffs did submit an affidavit from Dr. Richard Burroughs, who was employed by the FDA as a veterinary medical officer and was involved in the review process of Monsanto's application for Posilac. In his affidavit, Dr. Burroughs points out what he considers to be key flaws in the agency's review of the drug application and errors in Monsanto's safety testing of the drug. The information in Burroughs's affidavit might have been admissible as evidence tending to explain the record actually before the agency or the agency's decision-making process. *Overton Park,* 401 U.S. at 420–21, 91 S.Ct. at 825–26. However, in proposing findings of fact in support of their motion for summary judgment, plaintiffs rely on the Burroughs affidavit only once, in support of the proposition that "[o]ne of the major concerns is that rbST causes many potentially serious health problems in cows." I have accepted this fact as undisputed.

With the preliminary issues resolved, I turn now to the merits of the case.

D. *The FDA's Approval of Posilac*

The FDA is the federal agency responsible for assuring that new animal drugs are safe and effective for their intended use. Before approving a new animal drug application, the FDA requires a new

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drug sponsor to demonstrate that the food products from the subject animals will be safe for human consumption, that the drug is safe and effective for the animals in question and that the manufacture and use of the drug will not harm the environment. Approval proceeds in two steps. First, the drug sponsor seeks approval of its investigative new animal drug application, which outlines how the sponsor will conduct the necessary research. This research covers human food safety, animal safety and drug efficacy and includes clinical and field trials, laboratory studies, on-site inspections and other investigative methods. Second, upon completion of the studies, the sponsor submits a new animal drug application that employs investigational studies to establish the safety and efficacy of the drug.

***1191** Throughout the application process, the burden is on the applicant or drug sponsor to show that the new animal drug is both effective and safe under the proposed conditions of use. 21 U.S.C. § 360b; 21 C.F.R. § 514.1(b)(8). Effectiveness must be demonstrated on the basis of "substantial evidence" that the drug "will have the effect it purports or is represented to have under the conditions of use prescribed, recommended, or suggested in the proposed labeling thereof." 21 U.S.C. § 360b(d)(3). The Food, Drug, and Cosmetic Act does not indicate the standard an applicant must meet to demonstrate a new drug's safety or the evidence upon which the FDA must base its safety determination. However, the act requires the FDA to consider four specific factors when assessing safety: 1) the likelihood that the drug or a substance formed in food because of the drug will be consumed; 2) the cumulative effect that the drug will be likely to have on man or other animals; 3) safety factors that experts consider appropriate for extrapolating from animal experimentation data; and 4) whether it is likely that the conditions of use proposed or suggested in the labeling will be followed. 21 U.S.C. § 360b(d)(2); 21 C.F.R. § 514.111(a)(4). The FDA is required to take into account the drug's effect on the health of the target animal. 21 U.S.C. § 321(u). A new drug application must contain "full reports of adequate tests by all methods reasonably applicable to show whether or not the drug is safe for use under the conditions prescribed, recommended, or suggested in the proposed labeling." 21 U.S.C. § 360b(d)(1)(B). Such testing includes preclinical acute, subacute and chronic toxicity testing, clinical studies and filed investigations. 21 C.F.R. § 514.1(b)(8)(iii).

Plaintiffs contend that the FDA should not have approved Posilac because of safety concerns. For the reasons set out above in section C, *supra,* none of plaintiffs' proffered evidence indicating that rbST poses a danger to human health may be considered because it is outside the administrative record. The focus narrows, therefore, to plaintiffs' arguments that are grounded properly on the administrative record. Despite the limited amount of evidentiary support plaintiffs have collected, they continue to maintain that Monsanto failed to meet its burden under the Food, Drug, and Cosmetic Act. To survive summary judgment, plaintiffs must raise a genuine issue on the reasonableness of the FDA's conclusion that Monsanto met its burden of showing the safety of Posilac.

[14] In identifying what they consider to be arbitrary and capricious FDA determinations, plaintiffs begin with the assertion that the Posilac label does not adequately counteract the health risks to cows associated with the drug's use. The FDA approved Posilac, notwithstanding its admitted risks of side effects to cows, on the theory that this safety risk is "manageable" if farmers adopt herd management techniques and ongoing herd reproductive health programs as the Posilac label recommends. Plaintiffs contend that this manageable risk criterion is arbitrary and capricious because the drug's label is vague and farmers will not know how to interpret it. Defendants respond by noting that mastitis is not a new problem to dairy farms and that the increased incidence of mastitis caused by Posilac is not significantly great (0.1 per cow per year). It was on these two findings that the agency grounded its conclusion that the risk was

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and Cosmetic Act with regard to animal and consumer safety are precisely the ones plaintiffs contend must be considered under the National Environmental Policy Act. The agency's consideration of those harms in its review of Monsanto's new animal drug application dispensed with any need for a rereview of those issues under National Environmental Policy Act. *See id.* Had plaintiffs been successful on their claim that the FDA did not comply with the Food, Drug, and Cosmetic Act, they might have had a claim that the National Environmental Policy Act requirements were not met either, because both statutes require a thorough evaluation of Posilac's effects on human and bovine health and safety. However, plaintiffs have failed in their challenge to the agency's compliance with the Food, Drug, and Cosmetic Act and in any event their National Environmental Policy Act claim is premised solely on the agency's failure to duplicate its work.

[23] Plaintiffs contend that at a minimum, the agency should have been required to incorporate by reference its health and safety findings into the environmental assessment and the finding of no significant impact. This argument is not without merit. Such incorporation of the health and safety data by reference in the environmental assessment and finding of no significant impact would provide an interested party (or reviewing court) with a complete picture of all analysis bearing on the agency's obligations under the National Environmental Policy Act.

***1196** Plaintiffs' argument fails, however, for two interrelated reasons. First, at bottom, their argument is a purely informational one, which fails because they allege no harm stemming from the asserted procedural defect. *Cf. Foundation for Economic Trends v. Lyng,* 943 F.2d 79, 84–85 (D.C.Cir.1991) (informational injury alone is not enough to satisfy standing requirements under NEPA). Second, environmental assessments and findings of no significant impact are informal agency actions subject to judicial review under the arbitrary and capricious standard. As the Court of Appeals from the Seventh Circuit has stated, "a reviewing court may—without violating the rule of *SEC v. Chenery Corp.,* 332 U.S. 194, 67 S.Ct. 1575, 91 L.Ed. 1995 (1947), against the court's supplying a rationale for the agency's decision—'uphold a decision of less than ideal clarity if the agency's path may be reasonably discerned.' " *Cronin v. United States Dept. of Agriculture,* 919 F.2d at 442 (quoting *Bowman Transportation, Inc. v. Arkansas–Best Freight System, Inc.,* 419 U.S. 281, 286, 95 S.Ct. 438, 442, 42 L.Ed.2d 447 (1974)). Judicial review of a decision of an agency not to prepare an environmental impact statement requires a court to decide whether the agency's determination is "sustainable on the [entire] administrative record made," and is not limited to a review of the agency's statements regarding the lack of a need for an environmental impact statement. *Missouri Coalition for the Environment v. Corps of Engineers,* 866 F.2d 1025 at 1031. Because the record reveals that defendants have done health and safety analyses, their failure to reference those analyses in the environmental assessment or the finding of no significant impact does not undermine the adequacy of the conclusions reached in those documents.

[24] The final issue plaintiffs raise is the omission of any discussion of feasible alternatives from the environmental assessment and the finding of no significant impact. Plaintiffs argue that the agency should have considered the possibilities of a delay on approving the Posilac application until further studies on health and safety could be conducted, a lower recommended dosage to the cows, or approval of Posilac only as a prescription drug. (Plaintiffs proposed as fact that the environmental assessment did not address the alternative of approving the drug for marketing only when accompanied by detailed instructions or educational seminars regarding methods to minimize health risks, but they have not pursued this argument in their briefs.) The first alternative, a delay in approving the drug, was suggested to the agency. During the review process, the Foundation on Economic Trends, a non-profit consumer organization and a former plaintiff in this

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action, suggested that approval of the drug be postponed until further safety research could occur. However, plaintiffs have failed to offer evidence that the other two alternatives (a lower recommended dosage or prescription drug status) were ever presented to the agency for consideration. If an alternative is not presented to the agency for consideration, the agency cannot be attacked in federal court for not considering it. *Upper West Fork River Watershed Assoc. v. Corps of Engineers,* 414 F.Supp. 908, 920 (N.D.W.Va.1976) (when challenging agency's consideration of alternatives, plaintiffs may not rest upon naked conclusion that alternatives should have been considered). Plaintiffs have not shown that the agency was made aware of the two possible alternatives relating to lower dosages or making Posilac available only by prescription. Therefore, they may not challenge the agency's failure to consider them.

[25] Even if I assume that plaintiffs made a presentation of their alternative of delayed approval pending further research into health and safety that was adequate to require the agency to consider the proposal, *see Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council,* 435 U.S. 519, 98 S.Ct. 1197, 55 L.Ed.2d 460 (1978) (proponents of alternatives must make a preliminary showing that proposed alternative merits review before agency required to consider alternative during agency proceedings), plaintiffs would still not meet their burden of showing that an environmental impact statement should have been prepared. When an ***1197** agency determines that a proposed action poses a significant risk of harm to the environment, the agency must consider alternatives to the proposed action. *See* 42 U.S.C. § 4332(2)(c)(iii); 40 C.F.R. § 1502.14. However, if the agency determines that a proposed action will *not* significantly effect the environment, it is required to consider alternatives only when the proposal involves "unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E); *River Road Alliance, Inc. v. Corps of Engineers of United States Army,* 764 F.2d 445, 452 (7th Cir.1985), *cert. denied,* 475 U.S. 1055, 106 S.Ct. 1283, 89 L.Ed.2d 590 (1986). In this situation, I cannot perceive any unresolved conflict concerning uses of available resources. Plaintiffs' proposed alternative involves only a delay in approving the drug until further tests have been conducted. This situation does not involve an "available resource" as the term is used in § 4332(2)(E).

ORDER

IT IS ORDERED that the motions for summary judgment of defendants Donna Shalala, Secretary of Health and Human Services, and David Kessler, Commissioner of the Food and Drug Administration, and intervenor defendant Monsanto Company's motions for summary judgment are GRANTED. Plaintiffs' motion for summary judgment is DENIED. The clerk of court is directed to enter judgment for defendants and the intervenor defendant and close this case.

W.D.Wis.,1995.
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"manageable," and in any event not so great as to warrant denying approval of the drug. Defendants note also that under the Food, Drug, and Cosmetic Act, neither the sponsors of new animal drugs nor the FDA is held to a "zero risk" standard.

Although plaintiffs raise valid concerns about the manageable risk approach, I cannot conclude that the agency's decision was arbitrary and capricious. First, nothing in the record indicates that the agency overlooked some aspect of cow health when reviewing the Posilac application. To the contrary, the record demonstrates that the agency evaluated the target animal's safety as it was required to do under 21 U.S.C. § 321(u), considering each and every one of the known side effects associated with Posilac. Second, I cannot say it was irrational for the agency to conclude that the increased risk of mastitis caused by Posilac is not sufficiently great to warrant denying approval of the drug. This conclusion was based on the agency's determination that the risk of ***1192** mastitis caused by Posilac is much less than the risk caused by other variables such as seasonal change. Finally, although mastitis is a serious health concern, it is one familiar to dairy farmers, who know how to detect and treat it. I add, however, that in the future it would be helpful to reviewing courts for the FDA to set out the factors it looks at in determining whether a particular risk is a manageable one.

[15] Plaintiffs argue that defendants' decision to approve Posilac was arbitrary and capricious because defendants did not adequately consider the risk of higher levels of antibiotic drug residues in milk that could have an adverse impact on human health because of the greater resistance of certain bacteria, particularly human digestive bacteria. The FDA determined that the risk of exposure to increased amounts of antibiotics was slim because, among other things, the risk of increased mastitis is slight and the level of antibiotic drug residues in milk is highly regulated. Plaintiffs characterize this decision as arbitrary and capricious because many of the drugs used to treat bovine infections are not tested routinely under the current regulatory scheme. Defendants counter that the four antibiotics most commonly screened are also the ones most commonly used to treat bovine infection. The controversy boils down to whether it was proper for the FDA to rely on the current regulatory mechanism to assure that drug residues will be kept out of the milk supply.

Although plaintiffs have raised valid concerns about the adequacy of the current regulatory scheme to assure the purity of the nation's milk supply, they have not shown the agency's reliance on that scheme to be arbitrary and capricious. First and most important, the agency determined that the increased risk of mastitis was not overly great and on that basis concluded that the rise in the use of antibiotics would not be overly great either. Given these conclusions, it was rational for the agency to rest a determination of safety on the current milk purity regulatory scheme especially because milk is tested for the drugs most commonly used to treat mastitis, the beta-lactams. Although I understand plaintiffs' concerns, I conclude that the agency considered the relevant factors and that the record contains support for its determination.

[16] Third, plaintiffs are dissatisfied with the FDA's exploration of the potential risks associated with an increased level of IGF–1 in milk from cows treated with Posilac. The FDA concluded that an increased level of IGF–1 in milk presented no significant human health concerns. This conclusion was based on Monsanto's two-week rat study indicating no adverse effects from oral ingestion of IGF–1 and on other evidence indicating that IGF–1 levels rise only slightly when the producing cow is treated with rbST, that IGF–1 exists in the human blood stream at levels much higher than those appearing in milk and that IGF–1 is denatured when milk is boiled. Plaintiffs are correct that no long term studies have been done, but they have presented no admissible evidence that would show either that longer studies were required or that the two-week rat study was not scientifically adequate to permit

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the FDA to conclude that IGF–1 poses no significant risk to human health. Without any admissible evidence indicating that the two-week study did not support the conclusions that the agency drew from it, I cannot conclude that the agency's decision lacked a rational basis in the record.

E. *The FDA's Decision Not to Require Labeling of Products Derived from rbST-treated Cows*

Under the Food, Drug, and Cosmetic Act, food is deemed misbranded if its labeling is "false or misleading in any particular." 21 U.S.C. § 343(a)(1) . 21 U.S.C. § 321(n) provides further that:

> If an article is alleged to be misbranded because the labeling or advertising is misleading, then in determining whether the labeling or advertising is misleading there shall be taken into account (among other things) not only representations made or suggested by statement, word, design, device, or any combination thereof, but also the extent to which the labeling or advertising fails to reveal facts material in the light of such representations or material with respect to consequences which may ***1193** result from the use of the article to which the labeling or advertising relates under the conditions of use prescribed in the labeling or advertising thereof or under such conditions of use as are customary or usual.

Plaintiffs contend that food products derived from rbST-treated cows must be labeled as such if the products are to comply with these two provisions. They argue that milk derived from rbST-treated cows differs organoleptically from ordinary milk in several respects and that these differences are "material facts" requiring labeling. In addition, they argue that there is widespread consumer desire for mandatory labeling of rbST-derived milk and that such a degree of demand is also a "material fact" requiring labeling.

[17] An organoleptic difference is one capable of being detected by a human sense organ. *See Webster's Collegiate Dictionary* 953 (1991). In a different context from the one presented here, the FDA has stated:

> Information disclosing differences in performance characteristics (e.g., physical properties, flavor characteristics, functional properties and shelf life) is a material fact under section 201(n) of the act because it bears on the consequence of the use of the article. Accordingly, this information must be communicated to the consumer on the product label, or labeling would be misleading, and the product would be misbranded under section 403(a) of the act.

58 Fed.Reg. 2431, 2437 (January 6, 1993) (notice of final FDA rule regarding standards for products named with nutrient content claims, i.e., "fat free," and "low calorie"). However, plaintiffs have been able to point to no evidence in the administrative record indicating that milk derived from rbST-treated cows has performance characteristics or organoleptic properties different from milk from untreated cows. The increased incidence of mastitis in cows would not provide a basis for labeling because plaintiffs have provided no evidence that milk that finds its way to the consumer actually will contain higher levels of drug residues. Plaintiffs assert that the increased somatic cell counts and IGF–1 levels in rbST-derived milk are material facts warranting a label. However, they offer no evidence that increased somatic cell counts and increased IGF–1 levels in rbST-derived milk are organoleptic differences or that they alter the performance characteristics of milk. Indeed, plaintiffs have been unable to put into dispute the agency's conclusion that "administration of sometribove [rbST] ha[s] no significant effect on the overall composition of milk." Deft's Exh. 1, Vol. I, Freedom of Information Summary, at 19.

[18] Regarding widespread consumer demand, plaintiffs are incorrect in their assertion that by itself consumer opinion could suffice to require labeling. The FDA does consider consumer opinion relevant when determining whether a label is required to disclose a material fact, but a factual predicate to the requirement of labeling is a determina-

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tion that a product differs materially from the type of product it purports to be. If there is a difference, and consumers would likely want to know about the difference, then labeling is appropriate. If, however, the product does not differ in any significant way from what it purports to be, then it would be misbranding to label the product as different, even if consumers misperceived the product as different. In the absence of evidence of a material difference between rbST-derived milk and ordinary milk, the use of consumer demand as the rationale for labeling would violate the Food, Drug, and Cosmetic Act. Because plaintiffs have not presented any evidence demonstrating organoleptic differences between regular and rbST-derived milk or of any harmful effects of rbST on consumers, they have failed to carry their burden of demonstrating the arbitrary and capricious nature of the agency's determination.

F. *The National Environmental Policy Act*

The National Environmental Policy Act, 42 U.S.C. § 4321–4370d, requires federal agencies to prepare an environmental impact statement if the agency plans to undertake a "major" action "significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(c). Congress requires that these environmental impact statements include***1194** a discussion of the environmental impact of the proposed action, any adverse environmental harms that cannot be avoided if the project goes forward, alternatives to the proposed action, the relationship between "local short-term uses of man's environment and the maintenance and enhancement of long-term productivity," and any "irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." *Id.* An "environmental assessment" is a public document that "briefly provide[s] sufficient evidence and analysis for determining whether to prepare an environmental impact statement." 40 C.F.R. § 1508.9. If, on the basis of the environmental assessment, the agency determines that the proposed action will not have a significant effect on the quality of the human environment, then the agency prepares a "finding of no significant impact" in lieu of an environmental impact statement. 40 C.F.R. § 1501.4(e). A finding of no significant impact is an agency document explaining briefly the agency's reasons for concluding that the governmental action will not have a significant effect on the environment and that preparation of an environmental impact statement is unnecessary. 40 C.F.R. § 1509.13.

Plaintiffs contend that the FDA failed to comply with the National Environmental Policy Act when it determined that an environmental impact statement was unnecessary. In particular, plaintiffs contend that the decision not to prepare and environmental impact statement was arbitrary and capricious in light of the failure to address Posilac's socioeconomic effects on the dairy farmer and Posilac's likely effects on human and bovine health in either the environmental assessment or the finding of no significant impact. In addition, plaintiffs challenge the failure to discuss feasible alternatives in the environmental assessment and the finding of no significant impact.

[19][20] Regarding socioeconomic effects, the regulations promulgated under the National Environmental Policy Act provide that "economic or social effects are not intended by themselves to require preparation of the environmental impact statement." 40 C.F.R. § 1508.14. Plaintiffs are wrong when they assert that Posilac's socioeconomic effects on the dairy farmer require the preparation of an environmental impact statement. *See Missouri Coalition for the Environment v. Corps of Engineers of United States Army,* 866 F.2d 1025, 1031–32 (8th Cir.), *cert. denied,* 493 U.S. 820, 110 S.Ct. 76, 107 L.Ed.2d 42 (1989). It is true that an environmental impact statement must discuss economic or social effects of the proposed action to the extent those effects interrelate to its natural or physical environmental effects, but the regulations do not contemplate an independent consideration of socioeconomic effects when there is no determination that the proposed agency activity will signific-

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antly effect the environment. *Id.*

[21] Plaintiffs do not argue that the socioeconomic effects of Posilac would cause secondary environmental effects to such a significant degree as to require the preparation of an environmental impact statement. Rather, they contend merely that Posilac will cause both environmental and socioeconomic harms and that for this reason an environmental impact statement was necessary. This assertion is insufficient to satisfy the "interrelatedness" requirement of § 1508.14. I read 40 C.F.R. § 1508.14 to mean that it is only after an agency determines that the socioeconomic impact of the proposed agency action is likely to cause environmental harms itself that the agency needs to discuss the socioeconomic effects in the environmental impact statement. *See Breckinridge v. Rumsfeld,* 537 F.2d 864, 866 (6th Cir.1976) (accord), *cert. denied,* 429 U.S. 1061, 97 S.Ct. 785, 50 L.Ed.2d 777 (1977). This reading fully comports with the plain language of the regulation and the FDA's stand on the issue. (The FDA's policy is not to include purely socioeconomic considerations in its environmental assessments. FDA, *National Environmental Policy Act; Policies and Procedures; Final Rule,* 50 Fed.Reg. 16636, 16648 (Apr. 26, 1985).) Because defendants were not required to include a discussion of socioeconomic effects in their environmental assessment, it was not arbitrary and capricious to omit consideration of those nonenvironmental***1195** effects from the environmental assessment.

[22] The next question is whether, to comply with the National Environmental Policy Act, the FDA was required to take an independent and second look at the effects Posilac might have on the health of cows and consumers or whether the agency could rely on the safety evaluations it made pursuant to its statutory duties under the Food, Drug, and Cosmetic Act. Plaintiffs do not seem to argue that the analysis of the human and bovine health issues required under the two statutes differ in some way or that the analysis required under the Food, Drug, and Cosmetic Act is somehow less rigorous than that required under National Environmental Policy Act. Rather, plaintiffs' argument appears to be simply that the agency must review the issues twice to satisfy the requirements of both statutes.

40 C.F.R. § 1506.4 provides that "[a]ny environmental document in compliance with [the National Environmental Policy Act] may be combined with any other agency document to reduce duplication and paperwork." In *Citizens for Safe Power v. Nuclear Regulatory Comm'n,* 524 F.2d 1291 (D.C.Cir.1975), the issue was whether the NRC had to consider separately and formally the risks and benefits associated with the grant of a nuclear power plant license under both the National Environmental Policy Act and the Atomic Energy Act. The court answered the question in the negative, explaining its position as follows:

> [I]t would be pointless, and a waste of agency resources, to require the [Atomic Energy Commission] to reapply efforts that have already gone into its basic health and safety regulations ... in the absence of some evidence that a particular facility presents risks outside the parameters of the original rule making. And in evaluating the sufficiency of agency determinations in particular cases it would be stultifying formalism to disregard the whole record and test the [Atomic Energy Commission] compliance by only the evidence received at so-called 'health and safety' hearings; or [National Environmental Policy Act] compliance only on the basis of so-called 'environmental' hearings.

Id. at 1299. *See also Environmental Defense Fund v. Mathews,* 410 F.Supp. 336, 337 (D.D.C.1976) (National Environmental Policy Act does not supersede other statutory duties imposed upon an agency but rather supplements them to the extent that the two sets of duties are reconcilable). The lesson of *Citizens for Safe Power,* 524 F.2d 1291, applies with full force to the FDA action here. The concerns that motivated the Food, Drug,

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NOTICES

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 00N-1571]

Enrofloxacin for Poultry; Opportunity For Hearing

Tuesday, October 31, 2000

***64954** AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA), Center for Veterinary Medicine (CVM), is proposing to withdraw approval of the new animal drug application (NADA) for use of the fluoroquinolone enrofloxacin in poultry. This action is based on CVM's determinations that the use of fluoroquinolones in poultry causes the development of fluoroquinolone-resistant Campylobacter, a human pathogen, in poultry; this resistant Campylobacter is transferred to humans and is a significant cause of the development of resistant Campylobacter infections in humans; and resistant Campylobacter infections are a human health hazard. Therefore, CVM is proposing to withdraw the approval of the new animal drug application for use of enrofloxacin in poultry on the grounds that new evidence shows that the product has not been shown to be safe as provided for in the Federal Food, Drug, and Cosmetic Act (the act).

DATES: Submit written appearances and a request for a hearing by November 30, 2000. Submit all data and analysis upon which a request for a hearing relies by January 2, 2001.

ADDRESSES: Written appearances, requests for a hearing, data and analysis, and other comments are to be identified with Docket No. 00N-1571 and must be submitted to the Dockets Management Branch (HFA-305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: Linda R. Tollefson, Center for Veterinary Medicine (HFV-200), Food and Drug Administration, 7500 Standish Pl., Rockville, MD 20855, 301-827-6647.

SUPPLEMENTARY INFORMATION:

I. Fluoroquinolones Approved for Poultry Use

The following are approved uses for fluoroquinolones in poultry:

A. Sarafloxacin Hydrochloride

NADA 141-017, SaraFlox(R) WSP, approved August 18, 1995, for the control of mortality in growing turkeys and broiler chickens associated with Escherichia coli organisms, Abbott Laboratories, 1401 Sheridan Rd., North

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Chicago, IL 60064.

NADA 141-018, SaraFlox(R) Injection, approved October 12, 1995, for the control of early chick mortality associated with E. coli organisms in chickens and turkeys, Abbott Laboratories, 1401 Sheridan Rd., North Chicago, IL 60064.

B. Enrofloxacin

NADA 140-828, Baytril(R) 3.23% Concentrate Antimicrobial Solution, approved October 4, 1996, for the control of mortality in chickens associated with E. coli organisms and control of mortality in turkeys associated with E. coli and Pasteurella multocida organisms, Bayer Corp., Agriculture Division, Animal Health, Shawnee Mission, KS 66201.

Abbott Laboratories has requested withdrawal of NADA's 141-017 and 141-018 for use of sarafloxacin hydrochloride in poultry. By doing so, the company has waived its right to a hearing. Therefore, only NADA 140-828 is covered by this notice.

II. Summary of the Bases for Withdrawing the Approval

CVM is providing notice of an opportunity for a hearing on a proposal to withdraw approval of the NADA for enrofloxacin for use in poultry and to revoke the new animal drug regulations reflecting the approval of the NADA (21 CFR 520.813). Enrofloxacin belongs to the class of antimicrobial drugs called fluoroquinolones. Fluoroquinolones also are approved for use in humans. Fluoroquinolones are considered to be one of the most valuable antimicrobial drug classes available to treat human infections because of their spectrum of activity, pharmacodynamics, safety and ease of administration. This class of drugs is effective against a wide range of human diseases and is used both in treatment and prophylaxis of bacterial infections in the community and in hospitals. Fluoroquinolones are essential to the treatment of foodborne diseases. These diseases have a major public health impact in the United States.

Enrofloxacin oral solution for each of its uses in poultry is a new animal drug as defined in section 201(v) of the act (21 U.S.C. 321(v)). As such, the drug cannot be legally marketed in interstate commerce in the absence of an approved NADA (sections 301, 501, and 512 of the act (21 U.S.C. 331, 351, and 360b)). The requirements for approval of NADA's are set out in section 512 of the act. Section 512 of the act requires that a new animal drug must be shown to be safe and effective for its intended uses. Section 201(u) of the act provides that "safe" as used in section 512 "has reference to the health of man or animal."The determination of safety requires CVM to consider, among other relevant factors, "the probable consumption of such drug and of any substance formed in or on food because of the use of such drug" (section 512(d)(2)(A)). Accordingly, CVM must consider not only safety of the new animal drug to the target animal but also safety to humans of substances formed in or on food as a result of the use of the new animal drug.

FDA approved the NADA's for fluoroquinolones for use in poultry in 1995 and 1996 (see section V.A.3 of this document). After the approvals, CVM instituted several strategies intended to prevent or mitigate the development of resistance (see section V.A.4 of this document). However, resistance still quickly developed to the fluoroquinolones among the human foodborne pathogen, Campylobacter (see section V.B of this document). The resistance developed from use of fluoroquinolones in poultry under the approved, labeled conditions of use (see section V.B.1 of this document).

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By 1998, Centers for Disease Control and Prevention (CDC) testing found that 13.6 percent of Campylobacter human isolates were resistant to fluoroquinolones. Fluoroquinolone resistance rose to 17.6 percent among Campylobacter jejuni and 30 percent among Campylobacter coli isolated from ill humans in 1999. In 1998, testing established that approximately 9.4 percent of the C. jejuni isolated from chicken carcasses at federally inspected slaughter plants in the United States were fluoroquinolone resistant. Higher levels of fluoroquinolone resistance are observed in retail chicken (see section V.B of this document).

After thoroughly analyzing all the data and evidence, CVM has determined the following: The primary cause of the emergence of domestically-acquired fluoroquinolone-resistant Campylobacter infections in humans is the consumption of or contact with contaminated food (see section IV.B of this document). Moreover, poultry is the most likely source of campylobacteriosis ***64955** in humans (see section V.C.2 of this document), poultry is also a source of fluroquinolone-resistant Campylobacter (see sections V.B.3 and V.B.4 of this document), and administration of fluoroquinolones to chickens leads to development of fluoroquinolone-resistant Campylobacter in chickens.

CVM has concluded, based on data from surveillance programs, published literature and other sources, that the use of fluoroquinolones in poultry is a significant cause of fluoroquinolone-resistant Campylobacter on poultry carcasses, and therefore a significant cause of fluoroquinolone-resistant Campylobacter infections in humans. CVM's conclusion is supported by data establishing a temporal association between the approvals of these drugs for use in poultry in the United States and the increase in resistant Campylobacter infections in humans. Fluoroquinolones have been available for human use since 1986 and are commonly prescribed for persons with gastrointestinal illness. Yet resistance to fluoroquinolones did not increase among Campylobacter organisms above a very low level until 1996 or 1997, or soon after the approval and use of these drugs in poultry (see section V.B.5 of this document).

CVM's conclusion is also supported by comparison of fluoroquinolone use in poultry with the two most likely other possible causes of fluoroquinolone-resistant human infections—exposure to resistant Campylobacter during foreign travel, and direct use of fluoroquinolones in humans. People are exposed to fluoroquinolone-resistant Campylobacter during travel to developing countries (Ref. 1). However, a risk assessment conducted by CVM (see section V.C.3 of this document) demonstrates an unacceptable human health impact from domestically-acquired Campylobacter infections from use of fluoroquinolones in chickens (Ref. 2). These domestically acquired infections are much more likely to come from exposure to resistant Campylobacter through food than as a result of direct treatment with fluoroquinolones in humans (see section IV.B of this document). This is due in part to the fact that even if fluoroquinolone treatment results in resistant Campylobacter in an individual, the resistant organisms are unlikely to be transmitted to other people in the United States because generally the numbers of organisms present are low and fecal-oral transmission is required (Ref. 3). Therefore, the level of fluoroquinolone-resistant Campylobacter now seen in human isolates in the United States is not plausibly due to fluoroquinolone use in humans or the spread of resistant Campylobacter from one human to another.

Development of resistance to fluoroquinolones among Campylobacter has important consequences for human health (see section V.C of this document). Foodborne diseases have a major public health impact in the United States, and Campylobacter is the most common known cause of foodborne illness in the United States (Ref. 3). Fluoroquinolones are considered to be one of the most valuable antimicrobial drug classes available to treat a wide variety of human infections, including infections resistant to other drugs, and have been particularly important in the treatment of foodborne infections.

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Patients with severe enteric disease such as campylobacteriosis are usually treated empirically. Therefore, Campylobacter resistance presents a dilemma for the physician. If fluoroquinolone treatment is given based on symptoms, and the patient is infected with resistant Campylobacter, there is a risk that the treatment will not be effective or will be less effective and valuable time will be lost. If treatment is delayed until the causative organism and susceptibility are confirmed by a medical laboratory, again valuable time will be lost. That is, the disease may be prolonged or result in complications, especially in vulnerable patients with underlying health problems (Refs. 1 and 4). Use of an alternative drug to treat the patient empirically may be less desirable because that drug may have a narrower spectrum of activity or greater or more toxic side effects.

Isolation of fluoroquinolone-resistant Campylobacter organisms from humans means that fluoroquinolone therapy—if administered—would be ineffective or less effective in these humans. The current level of resistance to fluoroquinolones among human Campylobacter isolates attributed to the use of fluoroquinolones in poultry represents a harm to human health.

Furthermore, a risk assessment conducted by CVM demonstrated the magnitude of the adverse impact that the use of fluoroquinolones in chickens has on human health. The risk assessment determined that in 1999 a mean estimate of 11,477 persons (5th and 95th percentiles: 6,412 and 18,978) infected with campylobacteriosis and prescribed a fluoroquinolone would have had a fluoroquinolone-resistant illness due to the use of fluoroquinolones in chickens. These people are likely to have had prolonged illnesses or complications. Furthermore, CVM believes that the adverse human health effects were underestimated due to limitations in study methods and data.

Finally, CVM is concerned that the harm from fluoroquinolone-resistant Campylobacter infections will continue to increase such that more people will be unable to be effectively treated with fluoroquinolones when those drugs are needed for foodborne illness. With respect to the harm presented by resistant foodborne pathogens, it is especially important to take action as soon as a problem is detected since the nature of the problem is dynamic and relatively large shifts in the prevalence of resistance can occur within short timeframes (Refs. 5 and 6).

III. Legal Context of the Proposed Action

Section 512(e)(1)(B) of the act, requires withdrawal of approval of an NADA if:

* * * new evidence not contained in [an approved] application or not available to the Secretary until after such application was approved, or tests by new methods, or tests by methods not deemed reasonably applicable when such application was approved, evaluated together with the evidence available to the Secretary when the application was approved, shows that such drug is not shown to be safe for use under the conditions of use upon the basis of which the application was approved * * *.

Under this clause, to meet its initial burden to support withdrawal of an approval CVM must provide "a reasonable basis from which serious questions about the ultimate safety of [the drug] may be inferred."See Diethylstilbestrol: Withdrawal of Approval of New Animal Drug Applications; Commissioner's Decision (Commissioner's DES Decision), 44 FR 54852 at 54861, September 21, 1979, aff'd Rhone-Poulenc, Inc., Hess & Clark Div. v. FDA, 636 F.2d 750 (D.C. Cir 1980). See also Nitrofurans: Withdrawal of Approval of New Animal Drug Applications; Final Rule; Final Decision Following a Formal Evidentiary Public Hearing, 56 FR 41902, August 23, 1991."'Serious questions' can be raised where the evidence is not conclusive, but merely suggestive of an adverse effect" (44 FR 54861). Once this threshold burden has been satisfied, the burden passes to the sponsor to demonstrate safety. Id.

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Section 201(u) of the act provides that for purposes of section 512 of the act, "safe" has "reference to the health of man or animals."In determining whether a drug is "safe," section ***64956** 512(d)(2)(A) of the act requires FDA to consider "the probable consumption of such drug and any substance formed in or on food because of the use of such drug."

"Safe," in the context of human food safety, can be defined as "reasonable certainty of no harm." The definition is derived from language in H. Rept. 2284, 85th Cong., 2d. sess. 4095, 1958, defining the term "safe" as it appears in section 409 of the act (21 U.S.C. 348), which governs food additives. Substances formed in or on food due to the use of animal drugs were regulated under the food additive provisions in section 409 of the act until passage of the Animal Drug Amendments in 1968 (the 1968 amendments). The 1968 amendments merely consolidated all of the existing statutory authorities related to animal drugs into section 512 of the act, and the legislative history shows that the consolidation in no way changed the authorities with respect to the regulation of new animal drugs (S. Rept. 1308, 90th Cong., 2d. sess. 1, 1968). CVM has applied the "reasonable certainty of no harm" standard in determining the safety of substances formed in or on food as a result of the use of a new animal drug during the new animal drug application review process. CVM has done so by determining the level at which a substance formed in or on food as a result of the use of a new animal drug has no effect on humans (Ref. 75).

IV. Development of Antimicrobial Resistance As a Result of Drug Use in Animals

A. Development of Antimicrobial Resistance That Can Compromise Human Therapy

Antimicrobial drugs are products that affect bacteria by inhibiting their growth or by killing them outright. Antimicrobial drugs are used to treat bacterial disease in humans and since their discovery have prevented countless deaths worldwide. In animals, these drugs are used to control, prevent, and treat infection, and to enhance animal growth and feed efficiency.

That antimicrobial agents could select for resistant bacterial populations became apparent soon after the first antimicrobial drug, penicillin, was discovered. Antimicrobial use promotes antimicrobial resistance by selecting for resistant bacteria (Refs. 7 and 8). When an antimicrobial drug is used to treat an infection, the bacteria most sensitive to the drug die or are inhibited. Those bacteria that have, or acquire, the ability to resist the antimicrobial persist and replace the sensitive bacteria. If these bacteria that have developed resistance are disease causing (pathogenic) in humans, they may cause disease resistant to treatment (Refs. 7 and 9).

Selective pressure resulting from the use of antimicrobial drugs is the underlying force in the development and spread of resistant bacterial populations. The association between antimicrobial use and resistance has been documented in various settings (Ref. 7), for nosocomial infections (Ref. 10) as well as for community-acquired infections (Ref. 11).

B. Antimicrobial Resistance in Foodborne Pathogens of Animal Origin

In industrialized countries, the major foodborne pathogens, Campylobacter and Salmonella, are infrequently transferred from person to person (Refs. 3 and 12). In these countries, epidemiological data have demonstrated that the primary source of antibiotic resistant foodborne infections in humans is the acquisition of resistant bacteria from animals via food (Refs. 3, 13, and 14). This has been demonstrated through several different types of foodborne disease followup investigations, including laboratory surveillance, molecular subtyping, outbreak investigations, and studies on infectious dose and carriage rates (Refs. 15, 16, 17, and 18).

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CDC published an extensive review of epidemiological studies that focused on human foodborne infections caused by drug-resistant Salmonella and concluded that the resistant infections were acquired through contaminated foods of animal origin (Refs. 12 and 19). Transfer of Campylobacter from poultry to humans through food was demonstrated as early as 1984 (Ref. 15).

Recent emergence of a resistant foodborne pathogen that has a food-producing animal reservoir is illustrated by Salmonella enterica serotype Typhimurium Definitive Type 104 (DT104). DT104 is a multidrug resistant pathogen that is currently epidemic in human and food-producing animal populations in the United Kingdom and has been isolated in several countries in Europe (Refs. 20, 21, and 22). This organism has also been identified in livestock and poultry in the United States (Refs. 23, 24, and 25). Also, a report from the United Kingdom suggests that infections caused by DT104 may be associated with greater morbidity and mortality than infections by less resistant serotypes of Salmonella (Ref. 26).

C. Role of Animal Drug Use in the Development of Resistant Foodborne Pathogens

Scientific evidence demonstrates that the use of antimicrobials in food-producing animals can select for resistant bacteria of human health concern. Repeated dosing of food-producing animals can also contribute to the selection of resistant bacteria (Refs. 27 and 28). When an antimicrobial drug is administered to an animal, the most susceptible bacteria will be eliminated, while the least susceptible organisms will survive. These surviving bacteria will proliferate and become the predominant population. With additional exposure to the drug, the resistant populations of bacteria will expand and have an increasing probability of survival and dissemination.

The resistant bacteria that develop as a result of antimicrobial drug use in food-producing animals can then be transferred to humans via food. The contaminated food may cause disease in persons handling or consuming the food or in persons consuming food contaminated from the animal-derived food.

When antimicrobial drugs are administered to food-producing animals, they promote the emergence of resistance in bacteria that may not be pathogenic to the animal, but are pathogenic to humans (Refs. 15, 29, 30, 31, and 32). For example, Salmonella and Campylobacter are ubiquitous and can exist in the intestinal flora of various food-producing animals without causing disease in the animals. However, these bacteria can cause severe, even fatal, foodborne illness in humans. If using an antimicrobial in a food-producing animal causes resistance to occur in such bacteria, and the resistant bacteria cause an illness in a consumer who needs treatment, that treatment may be compromised (Ref.9).

The link between antimicrobial resistance in foodborne pathogenic bacteria and use of antimicrobials in food-producing animals has been demonstrated in a number of studies (Refs. 25, 33, 34, and 35). For example, an association has been noted between loss of susceptibility to fluoroquinolones among Salmonella enterica Typhimurium DT104 isolates (see section IV.B of this document) and the approval and use of a fluoroquinolone for veterinary therapeutic use in the United Kingdom (Refs. 14, 30, and 36). Moreover, fluoroquinolone administration to chickens infected with fluoqouinolone-sensitive C. jejuni has been shown to ***64957** result in the development of fluoroquinolone-resistant C. jejuni in those chickens (Ref. 35).

Epidemiological evidence shows that resistant foodborne pathogens are present on or within animals as a result of antimicrobial drug use in food-producing animals and can result in drug-resistant infections in humans (Refs. 1, 16, 37, 38, and 39). Holmberg et al. were the first to establish this by documenting an outbreak of salmonellosis in people caused by multi-drug-resistant Salmonella from eating hamburger originating from South Dakota beef cattle fed the antibiotic chlortetracycline for growth promotion (Ref. 16). As explained more fully in sec-

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tion V.B of this document, researchers in Minnesota recently reported on fluoroquinolone-resistant Campylobacter infections in humans acquired from poultry treated with fluoroquinolones (Ref. 1).

V. Antimicrobial Resistance Resulting From the Use of Fluoroquinolones in Poultry

As discussed below, during its evaluation of the NADA's for use of fluoroquinolones in poultry, CVM carefully considered the issue of potential resistance development due to the use of the drugs in poultry. When CVM approved the NADA's for use of fluoroquinolones in poultry, it believed that the fluoroquinolones could be used safely in poultry and that resistance development could be limited by certain restrictions placed on the use of the drugs. Resistance, however, has developed such that CVM now believes that its only option to protect human health is withdrawal of the approval of the NADA's for use of fluoroquinolones in poultry.

A. Circumstances Surrounding the Approval

1. Human Health Concern Related to Fluoroquinolone Resistance

Prior to FDA's approval of fluoroquinolones for use in food-producing animals, several scientific organizations and individual scientists expressed concern that the use of fluoroquinolones in food-producing animals would result in the selection of fluoroquinolone-resistant foodborne bacterial pathogens in humans (Refs. 7, 33, and 40). There were several reasons for these concerns.

First, as explained more fully in section V.C of this document, fluoroquinolones are very important for human therapy. Bacteria resistant to veterinary fluoroquinolones exhibit resistance to other compounds within the class. Thus, resistance to a fluoroquinolone used only in animals, such as enrofloxacin, confers resistance to all other fluoroquinolones, including ciprofloxacin and other fluoroquinolones used only in humans. The veterinary fluoroquinolone enrofloxacin is structurally similar to ciprofloxacin and a portion of it is metabolized to ciprofloxacin in the animal (Ref. 41).

Second, reports of studies conducted after approvals of fluoroquinolones for poultry in other countries had shown a relationship between the approval of fluoroquinolones for therapeutic use in food-producing animals and the development of fluoroquinolone resistance in Campylobacter in animals and humans. For example, the approval and use of these drugs in poultry in the Netherlands (Refs. 33, 35, and 42), and Spain (Refs. 43 and 44) preceded increases in fluoroquinolone resistance in Campylobacter isolates from treated animals and ill humans. In the Netherlands, Campylobacter isolates from humans and poultry were examined for resistance to the human fluoroquinolone ciprofloxacin between the years 1982 and 1989 to determine the influence of licensing of enrofloxacin for veterinary use in 1987 (Ref. 33). In 1982, none of the Campylobacter isolates from either human or poultry sources was resistant to ciprofloxacin. In 1989, fluoroquinolone resistance among the Campylobacter isolates was 11 percent in humans and 14 percent in poultry (Ref. 33).

Third, there was a concern about use of fluoroquinolones as water-soluble products. This use raised the possibility of development of resistant organisms in greater numbers than if the drugs were to be administered in an individually administered injectable dosage form. Due to the nature of animal production, the most efficient way to treat herds or flocks is to administer drugs through the water supply or the feed. When disease is detected in a herd of animals or a flock of poultry, the product is put into the animals' water supply, thereby exposing greater numbers of animals than just the few with clinical signs of the disease. The practice of treating an entire herd or flock is more likely to result in resistant pathogens than individual animal treatment due to the inability to control each animal's dose and the widespread contamination by water leakage and animal waste that occurs when

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large numbers of animals are treated, which result in untreated animals being exposed to the drug.

Selective pressure exerted by fluoroquinolone use is the driving force for the development and spread of the genetic mutations in Campylobacter that lead to fluoroquinolone resistance. Administering fluoroquinolones to large numbers of animals through water or feed could substantially increase the selective pressure on the organisms and facilitate the spread of resistant pathogens. An additional problem arises when the dose administered to each bird is variable, which is the case when the antimicrobial is administered ad libitum in the water. This practice may result in ineffective dosing in some animals and increase the probability of selecting for resistant zoonotic bacteria in both healthy and diseased animals.

2. Advisory Committee Review

Because of the concerns surrounding the use of fluoroquinolones in food-producing animals, CVM consulted with a panel of experts comprised of its Veterinary Medicine Advisory Committee and FDA's [Human] Anti-Infective Drug Advisory Committee in May 1994 to address the issue of use of fluoroquinolones in food-producing animals in light of concerns about antimicrobial resistance. The panel supported several restrictions on the use of the drugs in food-producing animals in order to minimize the human health risks related to the development of resistant bacteria in animals (Ref. 45). Frequently expressed recommendations of committee members included approval for therapeutic use by veterinary prescription only, prohibition of extra-label use, and establishment of a nationally representative surveillance system to prospectively monitor resistance trends of selected enteric bacteria of animals that can cause disease in humans (Ref. 45).

3. Approval of Enrofloxacin

The NADA for Baytril(R) 3.23% Concentrate Antimicrobial Solution (enrofloxacin) was approved October 4, 1996, for broiler chickens and growing turkeys. The approval is for therapeutic use: Enrofloxacin is approved for the control of mortality in chickens associated with E. coli organisms and control of mortality in turkeys associated with E. coli and P. multocida organisms.

At the time this drug was approved, microbial safety studies were not required for therapeutic uses of antimicrobial new animal drugs in food-producing animals. Thus, no studies were required of the drug sponsor, and none was performed, demonstrating the safety of the use of fluoroquinolones in poultry with respect to antimicrobial resistance and the potential for resistant pathogens to be transferred from poultry ***64958** to humans. At that time, the agency believed that such studies were necessary only for certain subtherapeutic feed uses in food-producing animals (21 CFR 558.15). However, increasing evidence that therapeutic as well as subtherapeutic use of antimicrobials in food-producing animals may select for resistant bacteria of human health concern led the agency to issue final guidance addressing this concern in December 1999 (Ref. 46). The guidance addresses how FDA intends to consider the potential human health impact of all uses, therapeutic as well as subtherapeutic, of all classes of antimicrobial new animal drugs intended for use in food-producing animals. The guidance states that preapproval studies to answer questions regarding the human health impact of the microbiological effects of an antimicrobial product may be needed for therapeutic as well as subtherapeutic products (Ref. 46).

4. Approval Restrictions, Surveillance, and Educational Activities

Certain actions were taken at or near the time of approval of the fluoroquinolones to help ensure that resistance to fluoroquinolones did not develop in bacteria that are transferred from poultry to humans, and to detect any trend towards the development of resistance at an early stage. First, CVM imposed two restrictions on the use of

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the fluoroquinolones. CVM limited the drugs to use by or on the order of a licensed veterinarian. Also, FDA issued an order to prohibit all extra-label uses of fluoroquinolones in animals, which became effective in August 1997 (21 CFR 530.41).

Second, the agency took steps to gather surveillance data on the development of antimicrobial resistance among foodborne pathogens, including resistance to fluoroquinolones. In 1996, FDA, CDC, and the U.S. Department of Agriculture (USDA) established the National Antimicrobial Resistance Monitoring System: Enteric Bacteria (NARMS) to prospectively monitor changes in antimicrobial susceptibilities of selected zoonotic enteric pathogens from human and animal clinical specimens, from healthy farm animals, and from carcasses of food-producing animals at slaughter (Ref. 47). Nontyphoid Salmonella was initially selected as the sentinel organism and the program has been expanded each year since its inception. NARMS is currently monitoring susceptibilities of human and animal isolates of Salmonella, E. coli, Campylobacter, and Enterococcus. NARMS is set up as two equal parts, human and animal, that use the same methodology for isolating and testing the organisms.

Animal isolate testing is conducted at the USDA Agricultural Research Service Russell Research Center. Human isolate testing is conducted at the CDC National Center for Infectious Diseases Foodborne Disease Laboratory. Goals and objectives of the monitoring program include: Providing descriptive data on the extent and temporal trends of antimicrobial susceptibility in enteric organisms from the human and animal populations; providing information to veterinarians, physicians, and public health authorities so that timely action can be taken; prolonging the life span of approved drugs by promoting the prudent use of antimicrobials; identifying areas for more detailed investigation; and guiding research on antimicrobial resistance.

Third, CVM has supported efforts by the American Veterinary Medical Association (AVMA) and several practitioner and producer groups to define and promote the appropriate use of antimicrobial drugs in food-producing animals to try to minimize the occurrence of resistant foodborne pathogens that may be transferred to humans through food. CVM is supporting the development of printed material and videotapes based on the prudent use guidelines developed by the AVMA to educate producers and veterinarians about food-producing animal drug use. CVM is also committed to help develop other educational strategies to be disseminated to veterinarians and food-producing animal producers via symposia and exhibits at scientific meetings. Veterinary medical schools may also use these educational materials as part of a food safety curriculum.

B. Development of Resistance After FDA Approvals of Fluoroquinolones for Use in Poultry

1. Overview

Despite the previously described restrictions placed by FDA on the use of the approved poultry fluoroquinolone products, fluoroquinolone resistance among Campylobacter developed and increased after the 1996 approvals. CVM believes, based on research, that prior to 1995, there was very little, if any, fluoroquinolone-resistant Campylobacter in the United States among domestically acquired foodborne disease (see section V.B.5 of this document). After the approval, however, fluoroquinolone resistance was observed in Campylobacter from human clinical cases, and in poultry isolates taken from slaughter plants and retail establishments. The results were obtained from NARMS and a key study by the Minnesota Department of Health. In the 4 years since approval of the fluoroquinolones, CVM has found very little evidence of extra-label use of these drugs in food-producing animals, based on information derived from regulatory inspections. Nor has CVM found evidence of over-the-counter sales of the poultry fluoroquinolones. Therefore, the agency's attempts to prevent the development of fluoroquinolone-resistant human pathogens through limiting these drugs to prescription use and by prohibit-

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ing extra-label use have not been sufficient.

2. Human Isolate Data from NARMS

CDC began routinely testing human Campylobacter isolates for resistance to fluoroquinolones in 1998, 2 years after approval of enrofloxacin for use in poultry. In 1998, CDC tested 346 human Campylobacter isolates and found 13.6 percent of the Campylobacter isolates were resistant to fluoroquinolones (Ref. 48). In 1999, CDC tested 315 human isolates of Campylobacter; fluoroquinolone resistance had risen to 17.6 percent among C. jejuni and 30 percent among C. coli, a statistically significant increase (Ref. 49).

3. Poultry Isolate Data From NARMS and Other Sources

Approximately 9.4 percent of the C. jejuni isolated from chicken carcasses at federally inspected slaughter plants in 1998 were fluoroquinolone resistant (Ref. 50). The Campylobacter isolates were collected in a pilot study during the latter 3 months of the year. The 1999 data set, collected for the entire year, shows that approximately 9.3 percent of the C. jejuni were resistant to fluoroquinolones (Ref. 51). However, the 1999 data when segregated by State show that several areas of the country had significantly higher than the 9.3 percent average level (Ref. 2). When the isolate test results are weighted by the level of chicken production in each State, the level of resistance among C. jejuni is approximately 12 percent for 1999 (Ref. 2).

Campylobacter isolates from retail chicken products show even higher levels of fluoroquinolone resistance. In January-June 1999, public health laboratories in Georgia, Maryland, and Minnesota, under the direction of the CDC, tested 180 chickens with 23 distinct brand names that were purchased from 25 grocery stores (Ref. 52). Campylobacter were isolated from 80 (44 percent) of the chickens. Nineteen (24 percent) of the samples had Campylobacter isolates resistant to ***64959** fluoroquinolones and 25 (32 percent) were resistant to nalidixic acid, a quinolone antimicrobial drug that serves as a precursor to fluoroquinolone resistance development (Ref. 52). These retail chicken findings are consistent with those from an earlier, independent study by the Minnesota Department of Health, described in the next subsection.

4. Human and Poultry Isolate Data From the Minnesota Study

Researchers at the Minnesota Department of Health studied quinolone and fluoroquinolone resistance among Minnesota residents, and evaluated chicken as the source of the resistance. They found that the proportion of fluoroquinolone-resistant C. jejuni isolates from humans increased from 1.3 percent in 1992 to 10.2 percent in 1998 (Ref. 1).

The proportion of resistant C. jejuni collected from all reported cases of illness increased only slightly from 1992 to 1994. Although researchers found that increases between 1996 and 1998 were predominantly associated with foreign travel, the percentage of resistant infections that were acquired domestically also increased from 0.3 percent to 3 percent between 1996 and 1998 (Ref. 1).

As part of the study, the Minnesota Department of Health in cooperation with the Minnesota Department of Agriculture collected 20 different brands of retail chicken products from 18 markets in the Twin Cities metro area in 1997. Campylobacter were isolated from 88 percent (80/91) of the samples; 20 percent of these were Campylobacter resistant to fluoroquinolones. The products with resistant strains had been processed in five States (Ref. 1).

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Molecular subtyping revealed a strong association between resistant C. jejuni strains from the retail chicken products and C. jejuni strains from the domestically acquired human cases of campylobacteriosis. The study used polymerase chain reaction with restriction length polymorphism flagellin gene typing to identify strains of fluoroquinolone-resistant C. jejuni among isolates from the domestically acquired human cases and locally available retail chicken products. The investigators attributed the 1996 to 1998 increase in resistant domestic cases among humans to poultry treated with fluoroquinolones (Ref. 1). The investigators concluded that "the use of fluoroquinolones in poultry, which began in the United States in 1995, has created a reservoir of resistant C. jejuni" (Ref. 1).

5. Summary of Fluoroquinolone Resistance Data

The most recent data on fluoroquinolone resistance among Campylobacter isolates (1999) show 17.6 percent resistance among C. jejuni in humans, and 9.3 percent resistance among C. jejuni on chickens sampled at slaughter plants. Retail samples taken in 1999 indicate even higher levels of fluoroquinolone-resistant Campylobacter on chickens (Ref. 52).

After thoroughly analyzing all the data and evidence, CVM has determined that a significant cause of the emergence of domestically-acquired fluoroquinolone-resistant Campylobacter infections in humans is the consumption of, or contact with, contaminated food (see section IV.B of this document), that poultry is the most likely source of campylobacteriosis in humans (see section V.C.2 of this document), and that poultry is also a source of resistant Campylobacter (see section V.B.3 and V.B.4 of this document). CVM has also concluded that the administration of fluoroquinolones to chickens leads to development of fluoroquinolone-resistant Campylobacter in the chickens (see section IV.C of this document). Fluoroquinolone-resistant Campylobacter have been found in broiler chicks that had been administered fluoroquinolone drugs (Ref. 35). Further, resistant Campylobacter found on chicken carcasses would not have resulted from use of a nonfluoroquinolone drug because fluoroquinolone resistance in Campylobacter arises exclusively from clonal expansion, rather than by the transfer of plasmids or resistance determinants (Ref. 53). Also, the fluoroquinolone resistance results only from drug use; that is, the resistance could not have developed naturally since fluoroquinolones are totally synthetic antimicrobials with no known natural analogues. (See also discussion in section IV.A of this document.) Consequently, CVM has concluded, based on a careful study of all relevant data and information, that use of fluoroquinolones in poultry is a significant cause of domestically acquired resistant Campylobacter infections in humans.

CVM's conclusion is supported by the establishment of a temporal association between the approval of the fluoroquinolones for poultry and the emergence of fluoroquinolone-resistant Campylobacter in humans. Although most of the data cited above were collected after the approval, CVM believes that there was very little, if any, fluoroquinolone-resistant Campylobacter in the United States among domestically acquired foodborne disease cases before the approvals. Fluoroquinolones have been available for human use since 1986 when ciprofloxacin was approved in the United States (Refs. 1 and 54). Ciprofloxacin soon was one of the most commonly used antimicrobials to treat infections caused by a variety of bacterial infections in humans, including Campylobacter infections. However, emergence of domestically acquired fluoroquinolone-resistant human foodborne infections in numbers large enough to be detected by national surveillance systems did not occur until sometime between 1996 and 1998

Ref. 1).

Only rare, sporadic, and isolated incidents of fluoroquinolone-resistant Campylobacter infections were reported

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in humans prior to 1995.[FN1] (NARMS was not initiated until January 1996 and Campylobacter were not tested until 1998.) In addition, as shown in section V.B.4 of this document, only very low levels of resistance were detected among isolates from human Campylobacter cases collected by the Minnesota Department of Health from 1992 to 1994 (Ref. 1). Additional data from Minnesota demonstrated an increase in fluoroquinolone resistance among Campylobacter collected from domestically-acquired cases of human illness after the approval of the poultry fluoroquinolones (Refs. 1 and 54). The researchers were able to conclude that the 1996 to 1998 increases in domestic cases were due to the use of fluoroquinolones in poultry. That conclusion is supported by the association found between molecular subtypes of resistant C. jejuni strains that were acquired domestically in humans and those found in chicken products (Ref. 1). (See section V.B.4 of this document.)

FN1 In two surveys encompassing 474 human isolates from 1982 to 1992 in the United States, only a single ciprofloxacin resistant isolate was identified. This isolate was subsequently speciated as C. lari, which is intrinsically resistant to fluoroquinolones (Ref. 54).

Because there was no food-producing animal fluoroquinolone use other than use in poultry until late 1998 (when CVM approved fluoroquinolones for use in cattle), CVM believes that the data presented in this section V.B of the document) provide strong evidence that the increase in domestically acquired fluoroquinolone resistance observed in people since 1996 (Ref. 1) is largely associated with the use of fluoroquinolones in poultry. Data from other countries, which showed ***64960** increases in Campylobacter resistance following approval of fluoroquinolones for use in poultry, support this conclusion as to temporal association (Refs. 33, 43, and 55). (See section V.A.1 of this document.)

CVM's conclusion is also supported by an examination of the two most likely other possible causes of fluoroquinolone-resistant Campylobacter in humans. One possible cause is the direct use of fluoroquinolones in humans. Although fluoroquinolone-resistant Campylobacter may develop in the intestinal tract of persons with these infections who are treated with fluoroquinolones, spread of the organisms to other persons is uncommon because person-to-person transmission of these organisms is rare in developed countries (Ref. 3). As a result, the resistance due to direct human use is likely to be limited (Refs. 12 and 19). (See section IV.B of this document.) The lack of an increase in fluoroquinolone-resistant human cases from the time when fluoroquinolones were first used in human medicine, the high level of human use since their approval, and the emergence of fluoroquinolone resistance in human cases of Campylobacter infections soon after the approval of fluoroquinolones for poultry, all support the conclusion that the resistance observed in humans is due to the use of fluoroquinolones in poultry.

Exposure to Campylobacter-contaminated food can occur during foreign travel and, indeed, some of the fluoroquinolone resistance identified among humans is due to acquiring an illness while traveling outside the United States. However, a risk assessment conducted by CVM demonstrates a significant human health impact from domestically acquired fluoroquinolone-resistant Campylobacter infections due to the use of fluoroquinolones in chickens (Ref. 2). (See section V.C.3 of this document.)

CVM therefore believes that a significant cause of the emergence of fluoroquinolone-resistant Campylobacter infections in humans is the consumption of, or contact with, contaminated poultry that had been administered fluoroquinolones, had contact with other poultry treated with this drug, or had contact with the environment contaminated directly or indirectly with this drug.

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C. Human Health Implications

1. Importance of Fluoroquinolines in Human Medicine

Fluoroquinolones are considered to be one of the most valuable antimicrobial drug classes available to treat human infections because of their broad spectrum of activity, pharmacokinetics, safety, and ease of administration (Ref. 56). This class of drugs is effective against a wide range of human diseases and is widely used both in treatment and prophylaxis of bacterial infections in the community and in hospitals (Ref. 56). Fluoroquinolones are important because they are active against a variety of organisms resistant to most other classes of antibiotics or for which alternative agents are more toxic and/or not available for oral administration. They have been very effective in treating or preventing serious, often life-threatening, infections in a number of major areas of human medicine, both in the hospital and in the community. In the hospital setting, the fluoroquinolones are very often life-saving drugs of choice for a wide variety of common resistant and serious infections because of both their activity and their favorable safety profiles.

Fluoroquinolones are particularly important in the treatment of gram negative infections, including those caused by Campylobacter, but also including Shigella, Salmonella, E. coli, Klebsiella and other Enterobactericiae. These type of enteric bacteria cause a wide variety of infections and are frequently resistant to agents such as ampicillin, tetracycline, trimethoprim-sulfa and many cephalosporins (Ref. 56). In addition, the fluoroquinolones are often less toxic and more convenient to administer than alternative treatments that may be available for resistant organisms.

Fluoroquinolones are the agents most frequently used as the drugs of choice in the empiric treatment of patients presenting to a physician with serious gastrointestinal symptoms such as acute diarrhea or possible enteric fever (e.g., typhoid fever) because they traditionally have exhibited a very high level of clinical effectiveness against most enteric pathogens (Refs. 4 and 57). Severity of illness is one of the most important criteria physicians use in determining which patients require immediate treatment for a presumed infectious enteric illness. Other criteria include having a complicating medical condition and belonging to a high-risk group such as persons who are immunocompromised. Upon presentation to the physician, the patient is examined and if treatment is deemed necessary, treatment is usually prescribed empirically, that is, without having the results of culture and sensitivity testing available prior to the selection of the treatment. Culture and sensitivity testing of Campylobacter can take 48 to 96 hours before results are available to provide guidance to the physician in selection of a treatment regimen. Thus, the physician needs to be able to confidently prescribe an agent likely to be immediately effective against the array of organisms most likely to be causing the patient's severe symptoms.

Treatment of serious susceptible enteric infections with an effective fluoroquinolone (e.g., ciprofloxacin) can reduce the duration of illness and most likely prevent complications and adverse outcomes, including hospitalization (Refs. 19 and 58). The magnitude of the benefit of antibiotic treatment is directly related to the early initiation of therapy (Refs. 19 and 58). For example, effective treatment of campylobacteriosis with fluoroquinolones has been shown to decrease the duration of illness from 10 days to 5 days and the mean duration of diarrhea from 5 to 1.3 days (Refs. 7, 19, and 58).

2. Foodborne Diseases

a. Introduction. Foodborne diseases have a major public health impact in the United States. Recent estimates describe 5,000 deaths and 76 million foodborne illnesses annually (Ref. 59). The causes of foodborne illness are varied and include bacteria, parasites, viruses, toxins and novel agents. Clinical severity of foodborne disease

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also varies and ranges from mild gastroenteritis to life-threatening neurologic, hepatic, and renal syndromes as well as septicemia (Ref. 59). Development of resistance in foodborne bacterial pathogens to safe and effective antimicrobials complicates the medical and public health concern as important treatment options are compromised or lost (Refs. 7, 19, 61, and 62).

b. Campylobacteriosis. The three primary causes of bacterial foodborne disease in the United States are Campylobacter, Salmonella, and some pathogenic strains of E. coli. Campylobacter infections are predominantly foodborne infections associated with animal-derived food products (Refs. 59, 63, and 64). Campylobacter is the most common known cause of foodborne illness in the United States (Ref. 3), causing an estimated 2 million cases every year (Ref. 60). Compared to patients with typical noninvasive salmonellosis, patients with C. jejuni or Campylobacter ***64961** coli gastroenteritis often experience more severe illness and are ill longer. Gastroenteritis caused by Campylobacter commonly causes severe diarrhea, often bloody, fever, severe abdominal pain, and can mimic acute appendicitis, which may result in unnecessary surgery (Ref. 65). While these symptoms usually improve within several days, they persist or recur in 15 to 25 percent of patients and can be confused with chronic bowel diseases (Ref. 65). For example, among 460 sporadic (not associated with an epidemic) cases of campylobacteriosis recently reported in 19 representative U.S. counties, the mean duration of illness was 10 days, with 7 lost workdays, and one-half hospitalization day. Five patients (1 percent) died (Ref. 66). Effective treatment of campylobacteriosis with fluoroquinolones within the first 2 days of illness decreased the duration of illness from 10 days to 5 days (Refs. 7, 19, and 58).

Campylobacter species are often found as commensal bacteria, which are bacteria that exist in an animal without causing harm to that animal. These bacteria are carried in the intestinal tract of food-producing animals and can contaminate food during slaughter and processing (Ref. 67). The USDA Food Safety Inspection Service has recently conducted surveys of recovery rates and estimated the mean number per unit (gram, cm^3) of product for some of the major foodborne pathogens found on raw animal products at slaughter and processing. Raw product isolation rates vary by species, with turkeys and chickens appearing to have the highest rates of Campylobacter recovery (Refs. 68, 69, 70, and 71).

Broiler chickens carry the highest carcass and ground product load of Campylobacter when compared to other food-producing animals at slaughter (Refs. 70 and 71). These data are consistent with the repeated observations in epidemiological studies of the increased risk of campylobacteriosis associated with exposure to poultry. In surveys of retail food products conducted by other organizations, Campylobacter was isolated from: 2 to 20 percent of raw beef, 40 percent of veal; up to 98 percent of chicken meat; low proportions of pork, mutton, and shellfish; 2 percent of fresh produce from outdoor markets and 1.5 percent of mushrooms (Refs. 15 and 72).

The symptoms exhibited by persons with an enteric foodborne illness include vomiting, diarrhea, abdominal pain, cramping, and fever. The causal agent of an enteric illness is not easily determined based upon symptoms alone. Empiric treatment of patients with serious enteric disease of presumed bacterial etiology is usual medical practice because when treatment is delayed (e.g., until the Campylobacter infection or another etiologic agent is confirmed by a medical laboratory), the therapy may be ineffective or less effective, and the illness is more likely to be prolonged or result in complications (Ref. 4). Also, the clinical signs of patients with campylobacteriosis are indistinguishable from enteric disease caused by Salmonella, which also is treated with fluoroquinolones. Relapses occur in approximately 5 to 10 percent of untreated patients with campylobacteriosis (Ref. 4) and have been associated with fluoroquinolone resistance (Ref. 74).

Antibiotic therapy is always indicated for patients who demonstrate symptoms of high fever, bloody diarrhea, or

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more than eight stools in 24 hours; who are immunosuppressed; who have bloodstream infections; or whose symptoms worsen or persist for more than 1 week (Ref. 4). More invasive disease such as blood-borne infections occur in less than 1 percent of patients with C. jejuni infections and are more common in the elderly or very young individuals as well as those with impaired immune systems (Ref. 65). Rare manifestations of campylobacteriosis can include meningitis, endocarditis, and septic abortion (Ref. 4).

Campylobacteriosis also carries the potential for serious sequelae as a result of immunologic reactions to the infection. The disease has been linked to reactive arthritis and Reiter's Syndrome as well as Guillain-Barre Syndrome (Ref. 65). Guillain-Barre Syndrome is an autoimmune-mediated disorder of the peripheral nervous system. Since the elimination of polio, this syndrome is now the most common cause of acute flaccid paralysis (Ref. 73). Many studies have shown a link between campylobacteriosis and Guillain-Barre Syndrome. Culture and serologic data indicate that 30 to 40 percent of patients with the syndrome have evidence of a preceding Campylobacter infection, but this may be an underestimate (Ref. 73). C. jejuni is the most common species identified from patients with Guillain-Barre Syndrome, but other species of Campylobacter may be involved (Ref. 73). It is not known whether resistant Campylobacter infections are more susceptible to developing sequelae such as Guillain-Barre Syndrome. There is also evidence suggesting that Guillain-Barre Syndrome may be more severe following infection with Campylobacter than other precipitating infections (Ref. 73).

3. Campylobacter Risk Assessment

The data on fluoroquinolone resistance levels, and the evidence leading to the conclusion that the use of fluoroquinolones in chickens is a significant cause of fluoroquinolone resistance in humans, establish an adverse effect on human health by fluoroquinolones. To assist in establishing the extent of the adverse human health impact of fluoroquinolone use in poultry, CVM developed a risk assessment model. The risk assessment estimates the extent of the risk to human health from resistant Campylobacter pathogens attributed to the use of fluoroquinolones in chickens in the United States. Specifically, the risk assessment model relates the prevalence of fluoroquinolone-resistant Campylobacter infections in humans associated with the consumption of chicken to the prevalence of fluoroquinolone-resistant Campylobacter in chickens (Ref. 2). The risk assessment addressed that portion of the risk that was quantifiable, which is the risk related to consumption of chicken. The unquantifiable portion, that portion due to spread of the pathogen from chicken to other foods through contamination during food preparation or from secondary spread to other animals, was not considered in the risk assessment.

As explained in section V.B.5 of this document, the presence of fluoroquinolone-resistant Campylobacter on chicken carcasses results from the use of fluoroquinolones in chickens. This conclusion was used as a parameter in the risk assessment. This does not mean, for purposes of the risk assessment, that every chicken carrying resistant Campylobacter had to have been treated with a fluoroquinolone. Resistant organisms could have been acquired from a contaminated environment due to fluoroquinolone drug use in a previous flock, through contact with other chickens during transportation to the slaughter plant and antemortem processing, or through contamination in the slaughter plant by other infected chicken carcasses.

The number of Campylobacter culture confirmed human cases in the U.S. population was used to estimate the total burden of campylobacteriosis. These data are collected from State public health laboratories that participate in FoodNet, the CDC's Foodborne Disease Active Surveillance ***64962** Network. FoodNet monitors the incidence of foodborne disease in humans and conducts studies to identify the sources and consequences of infection. Using the data on human Campylobacter cases reported in FoodNet, the risk assessment calculated a mean estimate of 1.7 million cases of campylobacteriosis (5th and 95th percentiles: 1.1 million and 2.7 million) for 1999

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(Ref. 2).

The model also estimates the number of fluoroquinolone-resistant Campylobacter cases in humans attributable to chickens. This estimate excludes travelers to countries outside the United States, those patients who were prescribed a fluoroquinolone prior to stool culture, and those patients who were unsure of the timing of their treatment in relation to stool culture. For 1999, the mean estimate of the domestically-acquired fluoroquinolone-resistant Campylobacter cases in humans attributable to chickens is 190,421 (5th and 95th percentiles: 103,471 and 318,321) (Ref. 2). The model also estimated the number of humans with fluoroquinolone-resistant campylobacteriosis due to chickens who actually received a fluoroquinolone drug for therapy.

For 1999, the estimated mean number of people infected with fluoroquinolone-resistant Campylobacter from consuming or handling chicken and who subsequently received a fluoroquinolone as therapy is 11,477 (5th and 95th percentiles: 6,412 and 18,978) (Ref. 2). These people received less effective or ineffective therapy for their infections. Because their therapy was less effective or ineffective, these people would have had adverse health effects. Since the risk assessment was limited to resistance development due to use of fluoroquinolones in chickens only and the impact is a mean estimate, the actual risk to humans from fluoroquinolone-resistant Campylobacter infections from all foodborne sources is likely to be higher.

4. Summary of Human Health Impact

Foodborne diseases have a major public health impact in the United States, and Campylobacter is the most common known cause of foodborne illness. Fluoroquinolones are especially important in the treatment of foodborne diseases. Selection of Campylobacter resistance to fluoroquinolones is therefore a particular human health concern. Fluoroquinolones used in treating patients with enteritis are typically prescribed empirically because when treatment is delayed pending the results of culture and sensitivity, the illness may be extended or therapy may be ineffective. Moreover, fluoroquinolone resistance in Campylobacter infections has been associated with relapses (Ref. 74).

Campylobacter resistance therefore presents a dilemma for the physician. If fluoroquinolone treatment is given based on symptoms, there is a risk that the treatment will not be effective or will be less effective and valuable time will be lost. If the physician waits for a culture to determine the organism and its susceptibility to antimicrobials, again valuable time will be lost. In either case, the illness may be prolonged and result in complications, including hospitalization and deaths. The physician could turn to another drug for empiric treatment, but alternatives with the spectrum of activity shown by the fluoroquinolones are not available or may be less desirable than the fluoroquinolone due to greater side effects associated with therapy or increased cost of treatment. Even if an acceptable alternative is available at the time, the public health is diminished by the loss of an effective drug from the physician's armamentarium. The Campylobacter risk assessment provides evidence of the extent of the adverse impact of fluoroquinolone use in poultry on human health. The risk assessment determined in 1999 a mean estimate of 11,477 people (5th and 95th percentiles: 6,412 and 18,978) infected with fluoroquinolone-resistant Campylobacter from consuming or handling chicken and who subsequently received a fluoroquinolone as therapy. The fact that fluoroquinolone use in poultry has resulted in increased resistance of Campylobacter infecting humans is clear, as is the risk to human health. Continued use will likely lead to even higher levels of resistance and additional adverse health effects.

VI. Other Considerations

Before issuing this notice of opportunity for a hearing on the withdrawal of the approval for use of fluoroquino-

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lones in poultry, CVM considered requiring revisions to the labeling of the fluoroquinolones to exert more control over their use. Limiting use to individual bird treatment and requiring that the drugs not be used more than once in any individual animal in order to minimize the initial development of resistant enteric organisms were options considered. CVM determined, however, that these use limitations would be impractical for both the veterinary practitioners and poultry producers. The limitations would necessitate mandatory animal identification and maintenance of extensive treatment records. Even if feasible, due to poultry production and processing practices, this approach would not prevent untreated poultry from picking up the resistant organism from treated poultry or from the environment, exposures that may be substantial during transportation to slaughter and antemortem containment.

CVM also considered establishing a drug registry requiring that veterinarians demonstrate the need for a fluoroquinolone through culture and antimicrobial susceptibility testing and request permission to use the drug in chickens or turkeys from CVM before doing so. This approach would greatly diminish the exposure of poultry to fluoroquinolones and could also be used to enforce a "single use" labeling provision. The treated animals could be tagged for followup testing at the slaughter plant and if resistant organisms were identified, the contaminated carcasses could be diverted to nonfood uses. CVM also determined that this alternative was impractical due to the cost of sampling, process control problems with accumulation of carcasses due to the prohibitive amount of time required for current resistance testing techniques, and the public health risk associated with the handling of contaminated carcasses.

VII. Notice of Opportunity for a Hearing

Therefore, notice is given to Bayer Corp., Agriculture Division, Animal Health, that CVM proposes to withdraw the approval of the fluoroquinolone enrofloxacin for use in poultry. This action is based on section 512(e)(1)(B) of the act in that new evidence not contained in the NADA or not available until after the application was approved, evaluated together with the evidence available when the application was approved, shows that enrofloxacin is not shown to be safe under the conditions of use upon the basis of which the application was approved.

In accordance with section 512 of the act and part 514 (21 CFR part 514) and under the authority delegated to the Director of the Center for Veterinary Medicine (21 CFR 5.84), CVM hereby provides an opportunity for a hearing to show why approval of the new animal drug application for enrofloxacin for use in poultry, NADA 141-828, should not be withdrawn. Any hearing would be subject to part 12 (21 CFR part 12).

If a sponsor decides to seek a hearing, the sponsor must file: (1) On or before November 30, 2000, a written notice of appearance and request for a hearing, and (2) on or before January 2, 2001, the ***64963** data, information, and analyses relied on to demonstrate that there is a genuine and substantial issue of fact to justify a hearing as specified in § 514.200.

Any other person may also submit comment on this notice. Procedures and requirements governing this notice of opportunity for a hearing, a notice of appearance and request for a hearing, submission of data, information, and analyses to justify a hearing, other comments, and a grant or denial of a hearing, are contained in § 514.200 and part 12.

The failure of a holder of an approval to file timely a written appearance and request for hearing as required by § 514.200 constitutes an election not to avail himself or herself of the opportunity for a hearing, and the Director of the Center for Veterinary Medicine will summarily enter a final order withdrawing the approvals.

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A request for a hearing may not rest upon mere allegations of denials, but must set forth specific facts showing that there is a genuine and substantial issue of fact that requires a hearing. If it conclusively appears from the face of the data, information, and factual analyses in the request for hearing that there is no genuine and substantial issue of fact that precludes the withdrawal of approval of the applications, or when a request for hearing is not made in the required format or with the required analyses, the Commissioner of Food and Drugs will enter summary judgment against the person who requests a hearing, making findings and conclusions, and denying a hearing.

If a hearing is requested and is justified by the sponsor's response to this notice of opportunity for a hearing, the issues will be defined, an administrative law judge will be assigned, and a written notice of the time and place at which the hearing will commence will be issued as soon as practicable.

All submissions under this notice must be filed in four copies. Except for data and information prohibited from public disclosure under 21 U.S.C. 331(j) or 18 U.S.C. 1905, the submissions may be seen in the Dockets Management Branch (address above) between 9 a.m. and 4 p.m. Monday through Friday.

This notice is issued under the Federal Food, Drug, and Cosmetic Act (section 512 (21 U.S.C. 360b)) and under the authority delegated to the Director of the Center for Veterinary Medicine (21 CFR 5.84).

VIII. Environmental Impact

The agency has determined under 21 CFR 25.33(g) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

IX. References

The following references have been placed on display in the Dockets Management Branch (address above) and may be seen by interested persons between 9 a.m. and 4 p.m., Monday through Friday.

1. Smith, K., J. Besser, C. Hedberg, F. T. Leano, J. B. Bender, J. H. Wicklund, B. P. Johnson, K. A. Moore, and M. Osterholm, "Quinolone-resistant Campylobacter Jejuni Infections in Minnesota, 1992-1998," New England Journal of Medicine, 340(20), pp. 1525-1532, 1999.

2. FDA, "Human Health Impact of Fluoroquinolone Resistant Campylobacter Attributed to the Consumption of Chicken," October 18, 2000.

3. Tauxe, R. V., "Epidemiology of Campylobacter Jejuni Infections in the United States and Other Industrial Nations," In: Campylobacter, edited by I. Nachamkin, M. J. Blaser, 2d Ed., American Society for Microbiology, Washington, DC, pp. 9-12, 2000.

4. Blaser, M., "Campylobacter and Related Species," In: Mandell, Douglas and Bennett's Principles and Practice of Infectious Disease, edited by G. Mandell, J. Bennett, and R. Dolin, 4th ed., Churchill Livingston, New York, pp. 1948-1956, 1995.

5. Jacobs-Reitsma, W., "Aspects of Epidemiology of Campylobacter in Poultry," Veterinarian Quarterly, 19(3), pp. 113-117, 1997.

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* FSIS requires product labels from red meat species with these claims also include the following further qualifying statement: "Free Range—Never Confined to Feedlot."

Geographic Location Claims—Background: Producers, processors, and retail/foodservice operators may want to differentiate their products by identifying the geographic region where the product was produced. References to individual States, countries, or specific or general geographic areas (e.g., Dakotas, Western) will constitute geographic location claims.

Claim and Standard:

• Location of Raising (e.g., "Mid-Western Raised Lamb" or "Raised in Montana").—The livestock are raised/grown in the specified geographic location from birth to harvest.

• Location of Finishing (e.g., "Rocky Mountain Fed Lamb" or "Nebraska Fed Beef").—The livestock are fed/finished in the specified geographic location for at least the last 100 days prior to harvest.

Grain Fed Claims—Background: Livestock are finished on high concentrate rations (grain feeding) to enhance meat palatability. A high concentrate grain ration is any cereal plant product that meets or exceeds 60 ***79555** Mega calories (Mcal) Net Energy for gain (NEg) per 100 pounds of ration dry matter (1996 NRC for cattle, 1998 NRC for swine).

Claim and Standard:

• Grain Fed (e.g., Corn Fed, if corn is the primary ingredient).—

Cattle—

(1) Average grain consumption must equal 50% or more of the ration;

(2) NEg must average at least 60 Mcal per 100 pounds of ration dry matter;

(3) Dry Matter Intake (DMI) during the finishing phase must be at least equal to: ((Cattle shrunk weight at the beginning of the finishing phase x 0.014) + 10 pounds). DMI tolerance cannot be less than 10% of this formula; and,

(4) Minimum number of days on feed is 100 days for slaughter steers and heifers and 30 days for cows.

Lambs—

(1) Average grain consumption must equal 50% or more of the ration; and,

(2) Minimum number of days on feed for slaughter lambs is 50 days.

Swine—

(1) Average grain consumption must equal: (a) 45% or more of the nursery phase (pig weight: 15-65 pounds) ration; and, (b) 65% or more of the finishing phase (pig weight: 65-300 pounds) ration.

(2) Minimum number of days on feed for slaughter hogs is 60 days.

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Grass Fed Claims—Background: This claim refers to the feeding regimen for livestock raised on grass, green or range pasture, or forage throughout their life cycle, with only limited supplemental grain feeding allowed. Since it is necessary to assure the animal's well being at all times, limited supplementation is allowed during adverse environmental conditions. Grass feeding usually results in products containing lower levels of external and internal fat (including marbling) than grain-fed livestock products.

Claim and Standard:

• Grass Fed.—Grass, green or range pasture, or forage shall be 80% or more of the primary energy source throughout the animal's life cycle.

Hormone Claims—Background: Hormones * are synthetic or naturally occurring compounds which have been shown to improve gain and feed efficiency, stimulate growth, and/or control reproductive activity. Since all plants and animals produce hormones, a "hormone-free" plant or meat product is a misnomer and a "hormone-free" marketing claim cannot be made. However, since some consumers prefer meat products from animals that have not received supplemental hormones and some markets restrict the sale of hormone-treated products, the following claims and standards will be recognized.

Claim and Standard:

• No supplemental hormones * used, Raised without supplemental hormones*, or No added hormones*.—The livestock have never received supplemental hormones from birth to harvest.

• No hormones* administered during finishing.—The livestock have not received supplemental hormones during the feeding/finishing period.

* The terms "hormone," "growth promotant," "growth stimulant," and "implant" are used interchangeably.

Livestock Identification Claims—Background: Livestock identification is used to establish ownership, ancestry, pedigree, or age; to trace origin of livestock; or to manage herd health, artificial insemination, and performance testing programs. Livestock identification from birth or a stated point of production through retail product outlets may also address consumer requests for more information about the characteristics of products they buy and increase returns to producers.

Claim and Standard:

• Source Verified.—Must include the following:

(1) Method of livestock identification;

(2) Location(s) where livestock are born, raised, fed, harvested, and processed; and,

(3) Identification of the producer(s).

• Individual Animal Identification.—Must fulfill the Source Verified requirements and also have unique, individual animal identification. The American Information Number (AIN) system or other numbering scheme that provides for unique identification of animals and verification of program claims may be used.

Preconditioning Claims—Background: Preconditioning of animals by livestock producers can yield advantages

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34. Helmuth, R. and D. Protz, "How to Modify Conditions Limiting Resistance in Bacteria in Animals and Other Reservoirs," Clinical Infectious Diseases, vol. 24 (Suppl. 1), pp. S136-138, 1997.

35. Jacobs-Reitsma, W. F., C. A. Kan, and N. M. Boulder, "The Induction of Quinolone Resistance in Campylobacter Bacteria in Broilers By Quinolone Treatment," Letters in Applied Microbiology, vol. 19, pp. 228-231, 1994.

36. Rowe, B., Multiple Drug Resistance in Salmonella:, The Threat to International Health, Wellcome Trust, 183 Euston Rd., London, 53, May 18-21, 1997.

37. Aarestrup, F. M., "Occurrence of Glycopeptide Resistance Among Enterococcus faecium Isolates From Conventional and Ecological Poultry Farms," Microbial Drug Resistance, 1(3), pp. 255-257, 1995.

38. Bager, F., M. Madsen, J. Christensen, and F. M. Aarestrup, "Avoparcin Used as a Growth Promoter is Associated With the Occurrence of Vancomycin-resistant Enterococcus faecium on Danish Poultry and Pig Farms," Preventive Veterinary Medicine, vol. 31, pp. 95-112, 1997.

39. Kruse, H., B. K. Johansen, L. M. Rorvik, and G. Schaller, "The Use of Avoparcin as a Growth Promoter and the Occurrence of Vancomycin Resistant Enterococcus species in Norwegian Poultry and Swine Production," Microbial Drug Resistance, 5(2), pp. 135-139, 1999.

40. Levy, S. B., The Antibiotic Paradox: How Miracle Drugs are Destroying the Miracle, Plenum Press, New York, pp. 130-136, 1992.

41. Moellering Jr., R. C., "Quinolone Antimicrobial Agents: Overview and Conclusions," In: Quinolone Antimicrobial Agents, 2d ed., edited by D. C. Hooper and J. S. Wolfson, American Society for Microbiology, Washington, DC, pp. 527-535, 1993.

42. Piddock, L. J. V., "Quinolone Resistance and Campylobacter spp," Journal of Antimicrobial Chemotherapy, vol. 36, pp. 891-898, 1995.

43. Perez-Tallero, E., F. Otero, C. Lopez-Lopategui, et al., "High prevalence of ciprofloxacin resistant Campylobacter jejuni/coli in Spain," Abstract C-21, p. 49. In: Program and Abstracts of the 37th Interscience Conference on Antimicrobial Agents and Chemotherapy, American Society of Microbiology, Washington, DC, 1997.

44. Velazquez, J. B., A. Jimenez, B. Chomon, and T. G. Villa, "Incidence and Transmission of Antibiotic Resistance in Campylobacter Jejuni and Campylobacter coli," Journal of Antimicrobial Chemotherapy, vol. 35, pp. 173-178, 1995.

45. FDA, transcript of the joint meeting of the Veterinary Medicine Advisory Committee and Anti-infective Drugs Advisory Committee, Gaithersburg, MD, May 12, 1994.

46. FDA, "Guidance for Industry: Consideration of the Human Health Impact of the Microbial Effects of Antimicrobial New Animal Drugs Intended for Use in Food-Producing Animals (GFI #78)," 64 FR 72083 and 72084, December 23, 1999.

47. Tollefson, L., F. J. Angulo, P. J. Fedorka-Cray, "National Surveillance For Antibiotic Resistance in Zoonotic Enteric Pathogens," In: Microbial Food Borne Pathogens, Veterinary Clinics of North America: Food Animal

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Practice 14(1):141-150, 1998.

48. Centers for Disease Control and Prevention, 1998 Annual Report NARMS National Antimicrobial Resistance Monitoring System: Enteric Bacteria.

49. Centers for Disease Control and Prevention, 1999 Annual Report NARMS National Antimicrobial Resistance Monitoring System: Enteric Bacteria.

50. U.S. Department of Agriculture, Agricultural Research Service, 1998 Preliminary Data: NARMS National Antimicrobial Resistance Monitoring System: Enteric Bacteria—Animal Campylobacter Isolate Report, Athens, GA, Personal communication Dr. P. Fedorka Cray.

51. U. S. Department of Agriculture, Agricultural Research Service, 1999 Preliminary Data: NARMS National Antimicrobial Resistance Monitoring System: Enteric Bacteria—Animal Campylobacter Isolate Report, Athens, GA, Personal communication Dr. P. Fedorka Cray.

52. Rossiter, S., K. Joyce, M. Ray, J. Benson, C. Mackinson, C. Gregg, M. Sullivan, K. Vought, F. Leano, J. Besser, N. Marano, F. Angulo, "High Prevalence of Antimicrobial-resistant, Including Fluoroquinolone-resistant, Campylobacter on Chicken in U.S. Grocery Stores," Meeting of the American Society for Microbiology, poster C296, Los Angeles, May 24, 2000.

53. Hooper, D. C., "New Uses for New and Old Quinolones and the Challenge of Resistance," Clinical Infectious Diseases, 30, pp. 243-254, 2000.

54. Smith, K., J. Bender, M. Osterholm, "Antimicrobial Resistance in Animals and Relevance to Human Infections," In: Campylobacter, edited by I. Nachamkin and M. Blaser, 2d ed., American Society for Microbiology, Washington, DC, pp. 483-495, 2000.

55. Threlfall, E. J., J. A. Frost, and B. Rowe, "Fluoroquinolone Resistance in Salmonellas and Campylobacte's From Humans," British Medical Journal, vol. 318, pp. 943-944, 1999.

56. Peterson, L., "Quinolone Resistance in Clinical Practice: Occurrence and Importance," In: Quinolone Antimicrobial Agents, edited by D. C. Hooper and J. S. Wolfson, 2d ed., American Society Microbiology, Washington, DC, pp. 119-137, 1993.

57. Sande, M., J. H. Chambers, "Antimicrobial Agents, General Considerations, Section IX, Chemotherapy of Microbial Diseases," In: Goodman and Gilman's The Pharmacological Basis of Therapeutics, edited by J. Hardman, L. Limbird, P. Molinoff, et al., 9th ed., The McGraw-Hill Companies, New York, p. 1039, 1996.

58. Sobel, J., R. Tauxe, A. Ries, C. Patton, and K. Maloney, The burden of Campylobacter Jejuni infections: A target for early treatment? 45th Annual Epidemic Intelligence Service (EIS) Conference, Centers for Disease Control and Prevention, Atlanta, GA, April 22-26, 1996.

59. Mead, P. S., L. Slutsker, V. Dietz, L. F. McCaig, J. S. Bresee, C. Shapiro, P. M. Griffin, and R. V. Tauxe, "Food-related Illness and Death in the United States," Emerging Infectious Diseases, (5)5, pp. 607-625, 1999.

60. Council for Agricultural Science and Technology, risk characterization: estimated numbers of illnesses and deaths, In: "Foodborne Pathogens: Risks and Consequences," task force report number 122:40-52, 1994.

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61. Lee, L. A., N. D. Puhr, E.K. Maloney, N. H. Bean, R. V. Tauxe, "Increase in Antimicrobial-resistant Salmonella Infections in the United States, 1989-1990," Journal of Infectious Diseases, vol. 170, pp. 128-134, 1994.

62. Linden, P. K., A. W. Pasculle, R. Manez, D. J. Kramer, J. J. Fung, A. D. Pinna, and S. Kusne, "Differences in Outcomes for Patients with Bacteremia Due to Vancomycin-resistant Enterococcus faecium or vancomycin-susceptible E. faecium," Clinical Infectious Diseases, vol. 22, pp. 663-670, 1996.***64965**

63. Deming, M., R. Tauxe, P. Blake et al., "Campylobacter Enteritis at a University: Transmission From Eating Chicken and From Cats," American Journal of Epidemiology, vol. 126, no. 3, pp. 526-534, 1987.

64. Hopkins, R., R. Olmsted, and G. Istre, "Endemic Campylobacter jejuni Infection in Colorado: Identified Risk Factors," American Journal of Public Health, 74(3), pp. 249-250, 1984.

65. Skirrow, M. B., M. J. Blaser, "Clinical Aspects of Campylobacter Infection," In: Campylobacter, edited by I. Nachamkin and M. Blaser, 2d ed., America Society Microbiology, Washington, DC, pp. 69-88, 2000.

66. Altekruse, S., N. Stern, P. Fields, and D. Swerdlow, "Campylobacter Jejuni—an Emerging Foodborne Pathogen," Emerging Infectious Diseases, 5(1), pp. 28-35, 1999.

67. Saeed, A., N. Harris, and R. DiGiacomo, "The Role of Exposure to Animals in the Etiology of Campylobacter Jejuni/coli enteritis," American Journal of Epidemiology, 137(1), pp. 108-114, 1993.

68. Shane, S., "Campylobacteriosis," In: Diseases of Poultry, edited by B. Calnek, H. Barnes, C. Beard, et al., 10th ed., Iowa State University Press, Ames, pp. 235-245, 1997.

69. U.S. Department of Agriculture Food Safety Inspection Service, Microbiology Division, Nationwide Broiler Chicken Microbiological Baseline Data Collection Program, July 1994-June 1995 pp. 1-34, April 1996.

70. U.S. Department of Agriculture Food Safety Inspection Service, Microbiology Division, Nationwide Raw Ground Chicken Microbiological Survey pp 1-8, May 1996.

71. U.S. Department of Agriculture Food Safety Inspection Service, Microbiology Division, Nationwide Raw Ground Turkey Microbiological Survey pp.1-8, May 1996.

72. Doyle, M. and J. Schoeni, "Isolation of Campylobacter Jejuni From Retail Mushrooms," Applied and Environmental Microbiology, 51(2), pp. 449-50, 1986.

73. Nachamkin, I., B. M. Allos, T. W. Ho, "Campylobacter Jejuni Infection and the Association With Guillain-Barre Syndrome," In: Campylobacter, edited by I. Nachamkin and M. Blaser, 2d ed., American Society Microbiology, Washington, DC, pp. 155-175, 2000.

74. Petruccelli, B. P., G. S. Murphy, J. L. Sanchez, S. Walz, R. DeFraites, J. Gelnett, R. L. Haberberger, P. Echeverria, and D. N. Taylor, "Treatment of Traveler's Diarrhea With Ciprofloxacin and Loperamide," Journal of Infectious Diseases, 165, pp. 557-560, 1992.

75. FDA, CVM, Guideline: General Principles for Evaluating the Safety of Compounds Used in Food-Producing Animals, July 1994.

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Dated: October 24, 2000.

Stephen F. Sundlof,

Director, Center for Veterinary Medicine.

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65 FR 64954-01, 2000 WL 1614197 (F.R.)
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tions," letter to the Editor, New England Journal of Medicine, 339(13), pp. 921-922, 1998.

21. Evans, S. and R. Davies, "Case Control Study of Multiple-resistant Salmonella typhimurium DT104 Infection of Cattle in Great Britain," Veterinary Record, 139(23), pp. 557-558, Dec. 7, 1996.

22. Threlfall, E. J., J. A. Frost, L. R. Ward, and B. Rowe, "Epidemic in Cattle and Humans of Salmonella typhimurium DT104 with Chromosomally Integrated Multiple Drug Resistance," Veterinary Record, vol. 143, p. 577, 1994.

23. Benson, C. E., D. S. Munro, and S. Rankin, "Salmonella typhimurium DT104 in the northeast USA," Veterinary Record, vol. 140, pp. 503-504, Nov. 8, 1997.

24. Besser, T. E., C. C. Gay, J. M. Gay, D. D. Hancock, D. Rice, L. C. Pritchett, and E. D. Erickson, "Salmonellosis Associated with S. Typhimurium DT104 in the USA," Veterinary Record, vol. 140, p.75, 1997.

25. Glynn, M. K., C. Bopp, W. Dewitt, P. Dabney, M. Mokhtar, and F. J. Angulo, "Emergence of Multidrug-resistant Salmonella enterica Serotype Typhimurium DT104 Infections in the United States," New ***64964** England Journal of Medicine, 338(19), pp. 1333-1338, 1998.

26. Wall, P.G., D. Morgan, K. Lamden, M. Ryan, M. Griffin, E. J. Threlfall, L. R. Ward, and B. Rowe, a case control study of infection with an epidemic strain of multiresistant Salmonella typhimurium DT104 in England and Wales, Communicable Disease Report, Vol. 4:R130-R135, Review No. 11, October 14, 1994.

27. Carratala, J., A. Fernandez-Sevilla, F. Tubau, M. A. Dominguez, and F. Gudiol, "Emergence of Fluoroquinolone-resistant Escherichia coli in Fecal Flora of Cancer Patients Receiving Norfloxacin Prophylaxis," Antimicrobial Agents and Chemotherapy, 40(2), pp. 503-505, 1996.

28. Pena, C., J. M. Albareda, R. Pallares, M. Pujol, F. Tubau, and J. Ariza, "Relationship Between Quinolone Use and Emergence of Ciprofloxacin-resistant Escherichia coli in Bloodstream Infections," Antimicrobial Agents and Chemotherapy, 39(2), pp. 520-524, 1995.

29. Bates, J., J. Jordens, and D. Griffiths, "Farm Animals as a Putative Reservoir for Vancomycin-resistant Enterococcal Infection in Man," Journal of Antimicrobial Chemotherapy, vol. 34, pp. 507-516, 1994.

30. Piddock, L. J. V., "Does the Use of Antimicrobial Agents in Veterinary Medicine and Animal Husbandry Select for Antibiotic Resistant Bacteria That Infect Man and Compromise Antimicrobial Chemotherapy?," Journal of Antimicrobial Chemotherapy, vol. 38, pp. 1-93, 1996.

31. World Health Organization (WHO), The Medical Impact of the Use of Antimicrobials in Food Animals, Report of a WHO meeting, WHO/EMC/ZOO/97.4, Berlin, Germany, October 13-17, 1997.

32. WHO, Use of Quinolones in Food Animals and Potential Impact on Human Health, Report of a WHO meeting, WHO/EMC/ZDI/98.10, Geneva, Switzerland, June 2-5, 1998.

33. Endtz, H. P., G. J. Ruijs, B. van Klingeren, W. H. Jansen, T. van der Reyden, and R. P. Mouton, "Quinolone Resistance in Campylobacter Isolated From Man and Poultry Following the Introduction of Fluoroquinolones in Veterinary Medicine," Journal of Antimicrobial Chemotherapy, vol. 27, pp. 199-208, 1991.

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6. O'Brien, T. F., "The Global Epidemic Nature of Antimicrobial Resistance and the Need to Monitor and Manage it Locally," Clinical Infectious Diseases, vol. 24 (Suppl. 1), pp. 2-8, 1997.

7. Anonymous; Report of the American Society for Microbiology Task Force on Antibiotic Resistance; The American Society for Microbiology, Public and Scientific Affairs Board; Washington, DC, March 16, 1995.

8. Institute of Medicine, Committee on Emerging Microbial Threats to Health, edited by J. Lederberg, R. E. Shope, and S. C. Oaks, Emerging Infections: Microbial Threats to Health in the United States, Washington, DC, National Academy Press, 1992.

9. National Research Council, "The Use of Drugs in Food Animals: Benefits and Risks," Food and Nutrition Board, Institute of Medicine, National Academy Press, Washington, DC, 1999.

10. McGowan, Jr. J. E., "Antimicrobial Resistance in Hospital Organisms and its Relation to Antibiotic Use," Reviews of Infectious Diseases, 5(6), pp. 1033-1048 Nov-Dec, 1983.

11. Baquero, F., J. Martinez-Beltran, and E. Loza, "A Review of Antibiotic Resistance Patterns of Streptococcus pneumoniae in Europe," Journal of Antimicrobial Chemotherapy, vol. 28 (Suppl. C), pp. 31-38, 1991.

12. Angulo, F. J., R. V. Tauxe, and M. L. Cohen, "The Origins and Consequences of Antimicrobial-resistant Nontyphoidal Salmonella: Implications for Use of Fluoroquinolones in Food Animals," In: Use of quinolones in food animals and potential impact on human health, WHO/EMC/ZDI/98.12, Geneva, Switzerland, pp. 205-219.

13. Harris, N., N. Weiss, and C. Nolan, "The Role of Poultry and Meats in The Etiology of Campylobacter jejuni/coli Enteritis," American Journal of Public Health, 76(4), pp. 407-411, April 1986.

14. Threlfall, E., J. Frost, L. Ward, and B. Rowe, "Increasing Spectrum of Resistance in Multiresistant Salmonella typhimurium," Lancet, vol. 347, pp. 1053-1054, 1996.

15. Communicable Disease Control Section, Seattle-King County Department of Public Health, "Surveillance of the Flow of Salmonella and Campylobacter in a Community," August 1984.

16. Holmberg, S. D., M. T. Osterholm, K. A. Senger, and M. L. Cohen, "Drug-resistant Salmonella From Animals Fed Antimicrobials," New England Journal of Medicine, 311(10), pp. 617-622, 1984.

17. Spika, J. S., S. H. Waterman, G. W. Soo Hoo, M. E. St. Louis, R. E. Pacer, S. M. James, M. L. Bissett, L. W. Mayer, J. Y. Chiu, B. Hall, K. Greene, M. E. Potter, M. L. Cohen, and P. A. Blake, "Chloramphenicol-Resistant Salmonella Newport Traced Through Hamburger to Dairy Farms," New England Journal of Medicine, 316(10), pp. 565-570, 1987.

18. Tacket, C. O., L. B. Dominguez, H. J. Fisher, and M. L. Cohen, "An Outbreak of Multiple-drug-resistant Salmonella enteritis From Raw Milk," Journal of the American Medical Association, 253(14), pp. 2058-2060, 1985.

19. Cohen, M. L. and R. V. Tauxe, "Drug-resistant Salmonella in the United States: An Epidemiologic Perspective," Science, vol. 234, pp. 964-969, 1986.

20. Carattoli, A., F. Tosini, and P. Visca, "Multidrug-resistant Salmonella enterica serotype Typhimurium Infec-

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United States District Court,
S.D. New York.
NATURAL RESOURCES DEFENSE COUNCIL, INC., et al., Plaintiffs,
v.
UNITED STATES FOOD AND DRUG ADMINISTRATION, et al., Defendants.

No. 11 Civ. 3562(THK).
June 1, 2012.

Background: Citizen organizations brought action against Food and Drug Administration (FDA), Department of Health and Human Services (HHS), and federal officials, alleging that FDA acted in violation of the Administrative Procedure Act (APA) and Food, Drug, and Cosmetic Act (FDCA) when it denied two citizen petitions requesting that FDA withdraw approval for certain uses of certain classes of antibiotics in food-producing animals. Cross-motions for summary judgment were filed.

Holdings: The District Court, Theodore H. Katz, United States Magistrate Judge, held that:
(1) FDA's decision was subject to judicial review, and
(2) FDA's decision was arbitrary and capricious.

Plaintiffs' motion granted; defendants' motion denied.

West Headnotes

[1] Administrative Law and Procedure 15A ⚷ 701

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(B) Decisions and Acts Reviewable
15Ak701 k. In general. Most Cited Cases

The exception to judicial review of agency action when an agency action is committed to agency discretion by law is very narrow and applicable in those rare instances where statutes are drawn in such broad terms that in a given case there is no law to apply. 5 U.S.C.A. § 701.

[2] Administrative Law and Procedure 15A ⚷ 701

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(B) Decisions and Acts Reviewable
15Ak701 k. In general. Most Cited Cases

Judicial review of agency action under Administrative Procedure Act (APA) is precluded if the statute is drawn so that a court would have no meaningful standard against which to judge the agency's exercise of discretion; in such cases, the courts have no legal norms pursuant to which to evaluate the challenged action, and thus no concrete limitations to impose on the agency's exercise of discretion. 5 U.S.C.A. § 701.

[3] Administrative Law and Procedure 15A ⚷ 701

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(B) Decisions and Acts Reviewable
15Ak701 k. In general. Most Cited Cases

In determining whether a matter has been committed solely to agency discretion, as would except action from judicial review under Administrative Procedure Act (APA), a court must consider both the nature of the administrative action at issue and the language and structure of the statute that supplies the applicable legal standards for reviewing that action. 5 U.S.C.A. § 701.

[4] Administrative Law and Procedure 15A ⚷ 706

15A Administrative Law and Procedure
15AV Judicial Review of Administrative De-

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cisions

15AV(B) Decisions and Acts Reviewable

15Ak706 k. Negative or affirmative nature. Most Cited Cases

Enforcement actions are presumptively committed to agency discretion by law and are therefore outside the bounds of judicial review under the Administrative Procedure Act (APA); however, this presumption of unreviewability may be rebutted where the substantive law has provided guidelines for the agency to follow in exercising its enforcement powers, or where the agency has consciously and expressly adopted a general policy that is so extreme as to amount to an abdication of its statutory responsibilities. 5 U.S.C.A. § 701(a)(2).

[5] Health 198H ⚷324

198H Health

198HI Regulation in General

198HI(E) Drugs; Medical Devices and Instruments

198Hk324 k. Animal drugs. Most Cited Cases

Food and Drug Administration's (FDA) decision not to initiate withdrawal of approval for certain uses of certain classes of antibiotics in food-producing animals was regulatory rather than enforcement decision, and thus decision was subject to judicial review under Administrative Procedure Act (APA); decision was result of FDA's denial of petition that citizen petitioners had right to bring, and denial rested in part on agency's decision to pursue different regulatory strategy. 5 U.S.C.A. § 701(a)(2); Federal Food, Drug, and Cosmetic Act, § 512(e)(1), 21 U.S.C.A. § 360b(e)(1); 21 C.F.R. § 10.30(b)(2).

[6] Administrative Law and Procedure 15A ⚷706

15A Administrative Law and Procedure

15AV Judicial Review of Administrative Decisions

15AV(B) Decisions and Acts Reviewable

15Ak706 k. Negative or affirmative nature. Most Cited Cases

Judicial review is readily available when a plaintiff brings suit challenging an agency's denial of a citizen petition requesting that the agency initiate informal rulemaking. 5 U.S.C.A. § 701(a)(2).

[7] Health 198H ⚷324

198H Health

198HI Regulation in General

198HI(E) Drugs; Medical Devices and Instruments

198Hk324 k. Animal drugs. Most Cited Cases

Even if Food and Drug Administration's (FDA) decision not to initiate withdrawal of approval for certain uses of certain classes of antibiotics in food-producing animals was enforcement decision, Food, Drug, and Cosmetic Act (FDCA) provided sufficient guidelines for agency to follow in exercising its enforcement powers to rebut presumption of unreviewability; after approval of drug application, FDA had continuing obligation to determine whether there were grounds for suspending or withdrawing approval, and to monitor and evaluate data regarding approved new animal drugs and institute withdrawal proceedings if data showed that drugs were no longer shown to be safe. 5 U.S.C.A. § 701(a)(2); Federal Food, Drug, and Cosmetic Act, § 1003(b), 21 U.S.C.A. § 393(b).

[8] Administrative Law and Procedure 15A ⚷760

15A Administrative Law and Procedure

15AV Judicial Review of Administrative Decisions

15AV(D) Scope of Review in General

15Ak754 Discretion of Administrative Agency

15Ak760 k. Wisdom, judgment or opinion. Most Cited Cases

In reviewing agency action under the Administrative Procedure Act (APA), a court may not substitute its judgment for that of the agency. 5 U.S.C.A. § 706(2)(A).

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[9] Administrative Law and Procedure 15A ⚷741

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(D) Scope of Review in General
15Ak741 k. In general. Most Cited Cases

Under the Administrative Procedure Act (APA), a reviewing court's inquiry of agency action must be searching and careful. 5 U.S.C.A. § 706(2)(A).

[10] Administrative Law and Procedure 15A ⚷763

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(D) Scope of Review in General
15Ak763 k. Arbitrary, unreasonable or capricious action; illegality. Most Cited Cases

An agency decision may be deemed arbitrary and capricious under Administrative Procedure Act (APA) if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered 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. 5 U.S.C.A. § 706(2)(A).

[11] Administrative Law and Procedure 15A ⚷763

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(D) Scope of Review in General
15Ak763 k. Arbitrary, unreasonable or capricious action; illegality. Most Cited Cases

To be upheld upon judicial review, the agency must have articulated a rational connection between the facts found and the choice made. 5 U.S.C.A. § 706(2)(A).

[12] Administrative Law and Procedure 15A ⚷301

15A Administrative Law and Procedure
15AIV Powers and Proceedings of Administrative Agencies, Officers and Agents
15AIV(A) In General
15Ak301 k. In general. Most Cited Cases

In responding to a citizen petition, an agency's reasons for action or inaction must conform to the authorizing statute.

[13] Health 198H ⚷324

198H Health
198HI Regulation in General
198HI(E) Drugs; Medical Devices and Instruments
198Hk324 k. Animal drugs. Most Cited Cases

Food and Drug Administration's (FDA) denial of two citizen petitions requesting that FDA withdraw approval for certain uses of certain classes of antibiotics in food-producing animals on grounds that it would be too time consuming and resource intensive to evaluate each individual drug's safety, and withdraw if drug was not shown to be safe, was arbitrary and capricious; agency failed to address petitions on their merits, agency did not evaluate science presented in petitions or assess safety of relevant drugs, although administrative record for citizen petitions was more than 3000 pages in length and contained numerous scientific studies of risks of antibiotic resistance from use of antibiotics in food-producing animals, agency did not address or even mention scientific evidence in its responses, and agency did not discuss or appear to consider governing criteria and overall purpose of Food, Drug, and Cosmetic Act (FDCA). Federal Food, Drug, and Cosmetic Act, § 512(e)(1)(B), 21 U.S.C.A. § 360b(e)(1)(B).

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Amy Ann Barcelo, Ellen Melissa London, United States Attorney Office, New York, NY, for Defendants.

***321 MEMORANDUM OPINION AND ORDER**
THEODORE H. KATZ, United States Magistrate Judge.

On March 22, 2012, this Court granted summary judgment to Plaintiffs Natural Resources Defense Council, Inc. ("NRDC"), Center for Science in the Public Interest ("CSPI"), Food Animal Concerns Trust ("FACT"), Public Citizen, and Union of Concerned Scientists, Inc. ("UCS"), (collectively "Plaintiffs") on their first claim for relief. *See Natural Res. Def. Council v. United States Food & Drug Admin.,* (*"NRDC I"*), No. 11 Civ. 3562(THK), 2012 WL 983544, at *20 (S.D.N.Y. Mar. 22, 2012). The Court determined that Defendants United States Food and Drug Administration ("FDA" or "Agency"), Margaret Hamburg, in her official capacity as Commissioner of the FDA, the Center for Veterinary Medicine ("CVM"), Bernadette Dunham, in her official capacity as Director of the CVM, United States Department of Health and Human Services ("HHS"), and Kathleen Sebelius, in her official capacity as Secretary of HHS, unlawfully withheld agency action by failing to implement withdrawal proceedings pursuant to the Food, Drug, and Cosmetic Act ("FDCA"), 21 U.S.C. § 360b(e), for certain uses of penicillin, oxytetracycline, and chlortetracycline in food-producing animals, *See id.* Presently before the Court are the parties' cross-motions for summary judgment on Plaintiffs' third claim for relief, which alleges that the FDA acted in violation of the Administrative Procedure Act ("APA"), 5 U.S.C. § 706(2), and the FDCA, 21 U.S.C. § 360b(e), when it denied two Citizen Petitions requesting that the FDA withdraw approval of certain uses of certain classes of antibiotics in food-producing animals. The parties have consented to trial before this Court, pursuant to 28 U.S.C. § 636(c). For the reasons that follow, Plaintiffs' motion is granted and Defendants' motion is denied.

BACKGROUND [FN1]

FN1. The Court assumes familiarity with the history of antibiotic use in food-producing animals, as it was discussed extensively in the March 22, 2012 decision. Accordingly, only the facts necessary for the disposition of the current dispute will be discussed.

I. *Statutory and Regulatory Background*

A. *The Food, Drug, and Cosmetic Act*

The FDCA empowers the FDA to regulate drugs sold in interstate commerce, including veterinary drugs. *See* 21 U.S.C. § 393(b). In conjunction with this authority, the FDA is required to "promote the public health" and to ensure that "human and veterinary drugs are safe and effective." 21 U.S.C. § 393(b)(1)-(2). Specifically, pursuant to the FDCA, the FDA must approve the use or intended use of any "new animal drug" [FN2] and the labeling thereof. *See* 21 U.S.C. § 360b(a)(1). Any person may submit a new animal drug application ("NADA") to the FDA for approval of the use or intended use of a new animal drug; the application must include sufficient evidence of the drug's safety and efficacy, including "full reports of investigations which have been made to show whether or not such drug is safe and effective for use [.]" 21 U.S.C. § 360b(b)(1)(A).[FN3] In general, the FDA will approve a NADA ***322** unless the agency finds that the drug use has not been shown to be safe or effective. *See* 21 U.S.C. § 360b(d)(1); 21 C.F.R. § 514.1(b)(8)(i).

FN2. A new animal drug is defined, in part, as "any drug intended for use for animals other than man, including any drug intended for use in animal feed but not including such animal feed...." *See* 21 U.S.C. § 321(v).

FN3. Any person may file an abbreviated new animal drug application ("ANADA")

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for approval of a generic animal drug.

Once the FDA has approved the use of a new animal drug, the applicant holder must make periodic reports to the Agency describing experience with the drug and any new research into the drug's safety and effectiveness. *See* 21 C.F.R. § 514.80(a)(2). The FDA reviews these periodic reports to determine whether approval of the drug use should be suspended or withdrawn pursuant to 21 U.S.C. § 360b(e). *See* 21 C.F.R. § 514.80(a)(3). Section 360b(e)(1) requires the FDA to withdraw approval of a new animal drug if it finds that, based on new evidence, the "drug is not shown to be safe...." *See* 21 U.S.C. § 360b(e)(1)(B).[FN4] The FDA must provide notice of an opportunity for a hearing ("NOOH") to a drug applicant prior to issuing a withdrawal order. *See* 21 U.S.C. § 360b(e)(1).

FN4. Section 360b(e)(1) lists six findings by the Agency that prompt withdrawal. *See* 21 U.S.C. § 360b(e)(1)(A)-(F). The most relevant findings for the present action are those described in subsection (B).

B. *Regulation of Antibiotics in Food–Producing Animals*

In the 1950s, the FDA approved applications for the use of various antibiotics in food-producing animals for a variety of non-disease treatment purposes, including growth promotion, feed efficiency, and disease prevention. For these uses, antibiotics were approved to be administered on a herd- or flock-wide basis at doses lower than those traditionally used to treat disease. When the Agency first approved these uses of antibiotics, little was known about the development of antibiotic-resistant bacteria or the role of agricultural use of antibiotics in the development of resistant bacteria.

However, by the late 1960s scientific evidence had emerged linking the widespread use of antibiotics in food-producing animals at low doses with the development of antibiotic-resistant bacteria. In 1970, the FDA convened a task force to study the risks associated with the use of antibiotics in animal feed. The task force was composed of scientists from the FDA, the National Institutes of Health, the U.S. Department of Agriculture, the Centers for Disease Control, as well as representatives from universities and industry. In 1972, the task force published its findings, concluding that: (1) the use of antibiotics in animal feed, especially at doses lower than those necessary to prevent or treat disease, favors the development of antibiotic-resistant bacteria; (2) animals receiving antibiotics in their feed may serve as a reservoir of antibiotic pathogens, which can produce human infections; (3) the prevalence of bacteria carrying transferrable resistant genes for multiple antibiotics had increased in animals, and the increase was related to the use of antibiotics; (4) antibiotic-resistant bacteria had been found on meat and meat products; and (5) the prevalence of antibiotic resistant bacteria in humans had increased. *See* Antibiotic and Sulfonamide Drugs in Animal Feeds, 37 Fed.Reg. 2,444, 2,444–45 (Feb. 1, 1972). The task force made several recommendations, including that (1) antibiotics used in human medicine be prohibited from use in animal feed unless they met safety criteria established by the FDA, and (2) several specific antibiotics be reserved for therapeutic use unless they met safety criteria for non-therapeutic use. *See id.* at 2,445.

In response to the findings of the task force, the FDA, in 1973, issued a regulation***323** providing that the Agency would propose to withdraw approval of all subtherapeutic uses of antibiotics in animal feed unless drug sponsors and other interested parties submitted data within the next two years "which resolve[d] conclusively the issues concerning [the drugs'] safety to man and animals ... under specific criteria" established by the FDA. Antibiotic and Sulfonamide Drugs in the Feed of Animals, 38 Fed.Reg. 9,811, 9,813 (Apr. 20, 1973) (codified at former 21 C.F.R. § 135.109; renumbered at 21 C.F.R. § 558.15). One of the most important of the human and animal health safety criteria that the FDA established for drug safety evaluations involved the transfer of antibiotic res-

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istant bacteria from animals to humans. The FDA required that "[a]n antibacterial drug fed at subtherapeutic levels to animals must be shown not to promote increased resistance to antibacterials used in human medicine." Penicillin–Containing Premixes Notice (" Penicillin Notice"), 42 Fed.Reg. 43,772, 43,774 (Aug. 30, 1977). The other health safety criteria involved showing that use of antibiotics would not increase salmonella in animals, would not increase the pathogenicity of bacteria, and would not increase residues in food ingested by man, which may cause "increased numbers of pathogenic bacteria or an increase in the resistence of pathogens to antibacterial agents used in human medicine." *See id.*

Over the next two years, the Bureau of Veterinary Medicine ("BVM"),[FN5] a subdivision of the FDA, reviewed the data submitted by drug sponsors to support the subtherapeutic use of antibiotics. By April 20, 1975, all data concerning the safety and efficacy criteria for antibiotic drugs had been received. *See id.* at 43,774. The FDA took no immediate action after receiving the data other than, in 1977, issuing notices proposing to withdraw approval of all subtherapeutic uses of penicillin in livestock, *see* Penicillin Notice, 42 Fed.Reg. at 43, 772, and, with limited exceptions, all subtherapeutic uses of oxytetracycline and chlortetracycline in livestock. *See* Tetracycline (Chlortetracycline and Oxytetracycline)-Containing Premises; Opportunity for Hearing (" Tetracycline Notice"), 42 Fed.Reg. 56,264, 56,264 (Oct. 21, 1977). Although the notices were properly promulgated and over twenty drug sponsors requested hearings on the matter, the FDA never held hearings or took any further action on the proposed withdrawals.[FN6]

FN5. The BVM was renamed the Center for Veterinary Medicine ("CVM") in 1984.

FN6. The FDA's failure to complete the withdrawal proceedings for penicillin, chlortetracycline, and oxytetracycline was the subject of Plaintiffs' first claim for relief. On March 22, 2012, this Court ordered the Agency to complete these withdrawal proceedings. *See NRDC I,* 2012 WL 983544, at *20.

Since 1977, the evidence of the risks to human health posed by antibiotic-resistant bacteria and the link between low-dose antibiotic use and the development of resistant-bacteria has grown. Nevertheless, with limited exceptions, the FDA has not withdrawn approval of the subtherapeutic use of antibiotics in food-producing animals.[FN7] Instead, the FDA has issued several non-binding guidance documents for industry to promote the judicious use of antibiotics.[FN8]

FN7. For example, in 2005, the Agency withdrew approval of the use of enrofloxacin, an antimicrobial drug within a class of drugs known as fluoroquinolones, in poultry. *See* Enroloxacin for Poultry; Final Decision on Withdrawal of New Animal Drug Application Following Formal Public Evidentiary Hearing; Availability, 70 Fed.Reg. 44,105, 44,105 (Aug. 1, 2005).

FN8. Specifically, in 2003, the FDA released Guidance for Industry # 152, which established a risk assessment to evaluate the risks posed by the subtherapeutic use of antibiotics in food-producing animals. (*See* Administrative Record ("Rec.") at 131.) The risk assessment was intended to be utilized by drug sponsors in the application process, and thus had no effect on already approved NADAs/ANADAs. In 2010, the FDA released Draft Guidance for Industry # 209 ("Draft Guidance # 209"), which established non-binding principles for the judicious use of antibiotics in food-producing animals. (*See id.* at 167.) Specifically, Guidance # 209 recommended that "[t]he use of medically important antimicrobial drugs in food-producing animals should be limited to those uses that are considered necessary for assuring animal health[,]" and "to those uses that include

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veterinary oversight or consultation." (*Id.* at 182–83.) Draft Guidance # 209 was finalized on April 13, 2012. (*See* Ex. A to the Declaration of Amy A. Barcelo, dated Apr. 16, 2012 ("Third Barcelo Decl.").)

***324** II. *The Citizen Petitions*

The issue presently before the Court involves the FDA's response to two Citizen Petitions, filed in 1999 and 2005, respectively. Both Petitions requested that the FDA begin withdrawal proceedings for all non-therapeutic uses of medically-important antibiotics in food-producing animals.

A. *The 1999 Citizen Petition*

On March 9, 1999, four of the named Plaintiffs, CSPI, FACT, Public Citizen, and UCS, as well as the Environmental Defense Fund, submitted a Citizen Petition ("1999 Petition") to the FDA requesting that the agency "rescind approvals for subtherapeutic uses in livestock of any antibiotic used in (or related to those used in) human medicine." (*See* Administrative Record ("Rec.", at 4–5).) The 1999 Petition defined "subtherapeutic use" as the "administration of [antibiotics] at a dosage less than is necessary and/or for a period of time longer than is necessary to treat an infection", (*id.* at 8), including use of such drugs for "growth promotion, improved feed efficiency, and disease prevention." FN9 (*Id.* at 5.) Although the 1999 Petition sought broad withdrawal of all subtherapeutic uses of antibiotics that are also used in humans, it named several specific classes of antibiotics for which it sought withdrawal, including penicillin, tetracyclines, erythromycin, lincomycin, tylosin, and virginiamycin. (*See id.* at 5.)

FN9. The 1999 Petition explained that "[t]he FDA defines subtherapeutic use as the use of antibiotics in livestock for more than 14 days," (Rec. at 8.).

The bulk of the 1999 Petition was devoted to a discussion of the scientific evidence indicating that the subtherapeutic use of antibiotics in food-producing animals poses a risk to human health. Citing numerous peer-reviewed studies, FN10 the 1999 Petition discussed the widespread subtherapeutic use of antibiotics in livestock; the evidence that such use leads to the selection of antibiotic resistance; the evidence that antibiotic-resistant bacteria can be transferred between animals and between animals and people; the evidence that antibiotic-resistant bacteria may transfer resistant genes to other bacteria; the evidence that the subtherapeutic use of antibiotics may select for multi-drug-resistant bacteria that can cause infections that are more deadly and difficult to treat; the evidence that nontherapeutic antibiotic use jeopardizes the therapeutic options in veterinary and human medicine; the evidence that the subtherapeutic use of antibiotics reduces the effectiveness of new human-use antibiotics; and evidence, from other countries, that decreasing the subtherapeutic use of antibiotics in food-producing animals can reduce the prevalence of antibiotic-resistant bacteria and does not adversely affect animal health.

FN10. The 1999 Petition cites over twenty articles from leading science and microbiology journals.

***325** 1. *FDA's Response to the 1999 Petition*

The FDA issued a tentative response to the 1999 Petition on August 19, 1999. (*See* Rec. at 50.) The FDA stated that it "is currently considering the issues raised in [the] citizen petition...." (*See id.*) However, "[b]ecause of the complex nature of the action requested [in the citizen petition], which requires careful and thorough scientific, legal, and policy consultation, analysis and coordination within the agency, FDA will require additional time to issue a final response to [the] citizen petition." (*See id.*) Specifically, the FDA stated that it would issue a final response after completing an "analysis of the comments received on [the] citizen petition, the framework document, numerous consultations and the resolution of the scientific, legal and policy issues." (*See id.*)

The FDA issued a second tentative response on February 28, 2001. (*See id.* at 51.) The FDA ex-

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plained the process for withdrawing approval of a new animal drug, emphasizing that "the petitions can only be granted or denied on a drug by drug basis as reviews are completed and resources permit." (*Id.* at 52.) The FDA described the findings necessary to trigger a withdrawal and the regulatory requirements for holding a hearing prior to withdrawing approval of a NADA/ANADA. The FDA explained that its "experience with contested, formal withdrawal proceedings is that the process can consume extensive periods of time and Agency resources." (*Id.* at 52.) The FDA discussed its other strategies for addressing antibiotic use in food-producing animals, including Guidance for Industry # 78, "which addresses how FDA intends to consider the potential human health impact of the microbial effects associated with all uses of antimicrobial new animal drugs in food-producing animals when approving such drugs," and a "framework document" establishing a risk-based framework for evaluating the microbial safety of the use of antimicrobial drugs in food-producing animals. (*See id.* at 53.) The FDA again stated that it could not issue a final decision until it had completed an analysis of the "comments received on [the] citizen petition, the Framework Document, numerous consultations, and the resolution of the scientific, legal, and policy issues." (*Id.* at 54.)

2. *FDA's Final Response to the 1999 Petition*

The FDA issued its final response to the 1999 Petition, denying the requested action, on November 7, 2011, during the pendency of this action. The FDA recounted the history of its handling of the 1999 Petition, including its earlier statements that it would not issue a final decision until the "FDA makes a decision about whether to withdraw the drug approvals listed in the petition." (*See id.* at 71.) The FDA explained that it was unclear from the 1999 Petition whether the action requested was to immediately issue a withdrawal order or to initiate withdrawal proceedings, and the Agency proceeded to discuss and deny both actions. (*See id.* at 72.) The FDA explained that it could not issue a withdrawal order for the drugs included in the 1999 Petition "[b]ecause no [withdrawal] hearings have been held with respect to the animal drugs at issue in the Citizen Petition, and ... the Commissioner has not made any final determination about whether grounds for withdrawal under [21 U.S.C. § 360b(e)] have been satisfied...." (*Id.* at 73.)

Moreover, the FDA refused to initiate withdrawal proceedings. The FDA offered two justifications for this decision. First, the FDA cited the time and expense involved in holding a withdrawal hearing. (*See id.* at 73.) Second, the FDA explained that it was pursuing a different ***326** strategy to promote the judicious use of antibiotics in food-producing animals. (*See id.*) Specifically, the FDA cited Draft Guidance # 209, entitled "The Judicious Use of Medically Important Antimicrobial Drugs in Food–Producing Animals," which recommends limiting the use of antibiotics in food-producing animals to judicious uses. (*See id.*) Draft Guidance # 209 states that the FDA does not consider growth promotion or feed efficiency to be judicious uses. (*See id.*) Draft Guidance # 209 also recommends that the use of medically-important antibiotics in food-producing animals should be limited to "uses that include veterinary oversight or consultation." (*See id.* at 74.) The FDA explained that "[b]ased on feedback [the FDA] has received [regarding Draft Guidance # 209], FDA believes that the animal pharmaceutical industry is generally responsive to the prospect of working cooperatively with the Agency to implement the principles recommended in [the Draft Guidance]." (*Id.*) The FDA stated that it planned to phase-out over-the-counter use of medically-important antibiotics in animal feed and move to a veterinary feed directive ("VFD") status for such drugs. The FDA also stated that it planned to work cooperatively with industry to achieve this transition. (*See id.*) "FDA believes that the strategy set out in draft guidance # 209 is a pathway to achieving the same goals as those advocated in [the 1999 Petition]...." (*Id.*) Accordingly, the FDA refused to initiate withdrawal proceedings for the drugs included in the 1999 Petition.

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B. *The 2005 Citizen Petition*

On April 7, 2005, named Plaintiff DCS, as well as the Environmental Defense Fund, the American Academy of Pediatrics, and the American Public Health Association, filed a Citizen Petition ("2005 Petition") with the FDA "to withdraw approvals for herdwide/flockwide uses of [certain antibiotics] FN11 in chicken, swine, and beef cattle for purposes of growth promotion (including weight gain and feed efficiency) and disease prevention and control (except for non-routine use where a bacterial infection has been diagnosed within a herd or flock) [.]" (*Id.* at 75.) The 2005 Petition did not seek "withdrawal of disease prevention or disease control uses where a drug is administered to individual animals, or to select groups or pens of animals, or where a drug is administered in response to a diagnosed outbreak of bacterial disease within a building, house, or feedlot." (*Id.* at 76.)

FN11. The 2005 Petition applied to penicillins, tetracyclines, aminoglyosides, streptogramins, macrolides, lincomycin, and sulfonamides. (Rec. at 75.)

The 2005 Petition emphasized that its requested action, withdrawal of approval of certain uses of certain medically-important antibiotics, was designed in accordance with the FDA's Guidance for Industry # 152 ("Guidance # 152"). This Guidance, issued on October 23, 2003, established criteria for evaluating the safety of agricultural antibiotics with regards to antibiotic resistance when considering new animal drug applications. (*See id.* at 76.) FN12

FN12. Guidance # 152, entitled "Evaluating the Safety of Antimicrobial New Animal Drugs with Regard to Their Microbiological Effects on Bacteria of Human Health Concern[,]" provides a "risk assessment approach for evaluating the microbial food safety of antimicrobial new animal drugs." (Rec. at 133.) The risk assessment provided in Guidance # 152 presented a means for drug applicants to demonstrate that new animal drugs meet the human health safety requirement in the NADA approval process. (*See* Rec. at 133.) Specifically, the risk assessment involved characterizing the hazard and then providing: (1) a release assessment—the probability that resistant bacteria are present in the target animal as a consequence of drug use (ranked as high, medium, or low),(2) an exposure assessment—the probability for humans to ingest bacteria in question from the relevant food commodity (ranked as high, medium, or low); and (3) a consequence assessment—the probability that human exposure to resistant bacteria results in an adverse health consequence (ranked as important, highly important, or critically important). (*See id.* at 137.) These assessments are used to provide an overall risk assessment, which is ranked as high, medium, or low. (*See id.*) The risk assessment provided in Guidance # 152 was only a suggestion, not a requirement, and only applicable to new animal drug applications.

Similar to the 1999 Petition, the 2005 Petition presented a comprehensive scientific***327** basis for its requested action. First, the 2005 Petition explained the background of antibiotic resistance and the agricultural use of antibiotics. (*See id.* at 77–80.) The 2005 Petition then discussed the development of Guidance # 152 and the legal standard for the FDA to withdraw approval of a new animal drug application. (*See id.* at 80–83.) The 2005 Petition then presented scientific evidence that the approved uses of antibiotics covered in the Petition are not consistent with the safety criteria in Guidance # 152. (*See id.* at 83–89.) The 2005 Petition explained that, pursuant to Guidance # 152, only low-risk antibiotic drugs should be administered to food-producing animals on a flock-wide or herd-wide basis. (*See id.* at 84–85.) Using the criteria set forth in Guidance # 152, the 2005 Petition demonstrated that the antibiotics covered by the Petition are not low-risk based on their release, exposure,

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and consequence. (*See id.* at 85–89.) Moreover, use of the antibiotics covered in the 2005 Petition in chicken, swine, or beef cattle results in a high-or medium-risk. (*See id.* at 89.) The 2005 Petition concluded by repeating its request that FDA begin withdrawal proceedings for herd-wide and flock-wide uses of critically important and highly important antibiotics in chicken, swine, and beef cattle. (*See id.* at 89.)

1. *FDA's Initial Response to the 2005 Petition*

The FDA provided a tentative response to the 2005 Petition on October 4, 2005. (*See* Rec. at 124.) The response summarized the action requested—withdrawal of medically-important antibiotics based on the criteria presented in Guidance # 152—and explained that to withdraw approval of a new animal drug required the completion of two processes. (*See id.*) First, the CVM must determine whether to initiate formal withdrawal proceedings. (*See id.*) Second, if the CVM decides to initiate formal withdrawal proceedings, the Agency must then undertake the formal withdrawal procedures required by statute, including providing notice and an opportunity of a hearing to the drug sponsor. (*See id.*) The response stated:

> For legal, scientific and resource reasons, withdrawal actions for the petitioned drugs need to be considered on a drug by drug basis. Data and information will need to be reviewed and analyzed for each drug. Thus, the petitions can only be granted or denied on a drug by drug basis as reviews are completed and resources permit.
>
> (*Id.*)

The FDA then explained that to initiate formal withdrawal proceedings one of the grounds listed in § 360b(e)(1) must be satisfied. (*See id.*) The FDA detailed the administrative process required to withdraw approval of a new animal drug, including issuing a notice for each drug, providing an opportunity for a formal evidentiary hearing, and the right to appeal the decision made by a hearing officer. ***328** (*See id.* at 125.) The FDA noted that formal withdrawal proceedings may take years to complete and may consume extensive agency resources. (*See id.*) The FDA then explained its current approach to regulating antibiotics in animal feed, as presented in Guidance # 152. The FDA concluded by stating that "the petition can only be granted or denied when the Agency makes a final decision on whether to withdraw any of the drug approvals listed in your petition."

2. *FDA's Final Response to the 2005 Petition*

On November 7, 2011, during the pendency of this litigation, the FDA issued a final response to the 2005 Petition. (*See id.* at 127.) The FDA stated that "[a]lthough we share [petitioners'] concern about the use of medically important antimicrobial drugs in food-producing animals for growth promotion and feed efficiency indications (i.e., production uses), ... FDA is denying your petition." (*Id.*) The FDA explained that the CVM's decision whether or not to initiate formal withdrawal proceedings for a new animal drug is "primarily an internal process, although participation by drug sponsors and the public may be requested." (*Id.* at 128.)

The FDA then explained that for "various reasons the Agency has decided not to institute formal withdrawal proceedings at this time and instead is currently pursuing other alternatives to address the issue of antimicrobial resistance related to the production use of antimicrobials in animal agriculture." (*Id.*) The FDA's decision was based, in part, on "[t]he Agency's experience with contested, formal withdrawal proceedings [which] can consume extensive periods of time and Agency resources." (*Id.* at 128–29.) The FDA continued:

> Recognizing that the process of reviewing safety information for antimicrobial drugs approved before 2003, and pursuing withdrawal proceedings in some cases, would take many years and would impose significant resource demands on the Agency, in June 2010, FDA proposed a different strategy to promote the judicious use of medically important antimicrobials in food-producing animals in [Draft Guidance # 209] ....

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(*Id.* at 129.) The FDA then explained the substance of Draft Guidance # 209 and the FDA's "belie[f] that the animal pharmaceutical industry is generally responsive to the prospect of working cooperatively with the Agency to implement the principles recommended in [Draft Guidance # 209]." (*Id.*) The FDA concluded:

> FDA believes that the strategy set out in [Draft Guidance # 209] is a pathway to achieving the same goals as those advocated by [petitioners], i.e., judicious use of medically-important antimicrobials. Additionally, given the considerable amount of Agency resources that are required to pursue withdrawal proceedings, we believe the current proposed approach will accomplish these goals in a more timely and resource-efficient manner than would otherwise be the case. Moreover, this strategy does not foreclose initiating withdrawal proceedings in the future."

(*Id.* at 130.)

C. *Subsequent Agency Action*

On April 13, 2012, the FDA released the finalized Guidance for Industry # 209, "The Judicious Use of Medically Important Antimicrobial Drugs in Food Producing Animals." (*See* Ex. A to the Declaration of Amy A. Barcelo, dated Apr. 16, 2012 ("Apr. 16 Barcelo Decl.") at 1.) As with the Draft Guidance for Industry # 209, the final guidance provided "a framework for the voluntary adoption of practices to ensure the appropriate or judicious ***329** use of medically important antimicrobial drugs in food-producing animals." (*See id.* at 3.) The framework includes "phasing in such measures as (1) limiting medically important antimicrobial drugs to uses in food-producing animals that are considered necessary for assuring animal health; and (2) limiting such drugs to uses in food-producing animals that include veterinary oversight or consultation." (*Id.*) Guidance # 209 acknowledged that "[a]ntimicrobial resistance, and the resulting failure of antimicrobial therapies in humans is a mounting public health problem of global significance[,]" and that "[t]his phenomenon is driven by many factors including the use of antimicrobial drugs in ... animals." (*Id.* at 4.) The Guidance contained a thorough review of the most seminal reports and peer-reviewed scientific literature on the issue of antimicrobial resistance. (*See id.* at 5–17.)

On April 13, 2012, the FDA released Draft Guidance for Industry # 213, entitled "New Animal Drugs and New Animal Drug Combination Products Administered in or on Medicated Feed or Drinking Water of Food–Producing Animals; Recommendations for Drug Sponsors for Voluntarily Aligning Product Use Conditions with [Guidance] # 209." (*See* Ex. C to the Apr. 16 Barcelo Decl. at 2.) Draft Guidance # 213 contains information for the relevant drug sponsors "to facilitate voluntary changes to the conditions of use ... consistent with FDA's recommendations included in [Guidance # 209]," [FN13] (*Id.*) The FDA explained that it

> recognize[d] the significance of the proposed changes and the potential impacts such changes will have on the animal pharmaceutical industry, animal producers, the animal feed industry and the veterinary profession. For this reason, FDA is currently pursuing a strategy for the voluntary adoption of these changes in an effort to minimize the impacts and provide for an orderly transition.

(*Id.* at 7.) The Agency requested that affected drug sponsors that intended to make the voluntary changes inform the Agency within three

FN13. Draft Guidance # 213 outlines several methods for drug sponsors to voluntarily comply with Guidance # 209. A drug sponsor of an affected drug may submit a supplemental new drug application that proposes to change the marketing status of the drug to veterinary feed directive or prescription and voluntarily withdraw the approval for all production uses. (*See id.* at 8.) Such a supplemental application would not require additional evidence of safety or efficacy, and in most cases the drug sponsor would only be required to submit revised labeling.

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months of the publication of the final version of Guidance # 213.[FN14] (*See id.*) The "FDA anticipates that sponsors of the affected products should be able to complete implementation of the changes discussed in this draft guidance within 3 years from the date of publication of the final version of this guidance." (*Id.*)

FN14. It is unknown when, if ever, the final version of Draft Guidance # 213 will be published.

III. *The Present Action*

Plaintiffs instituted the present action, on May 25, 2011, prior to the FDA's issuance of a final response to either the 1999 Petition or the 2005 Petition. In the Complaint, Plaintiffs claimed that the FDA's failure to issue a final response to the Citizen Petitions constituted an agency action unreasonably delayed in violation of the APA and the FDA's implementing regulations. (*See* Compl. ¶ 98.) Plaintiffs filed an Amended Complaint on July 7, 2011, but the claim regarding the FDA's failure to respond to the Petitions remained the same. (*See* Amended Compl. ***330** ("Am. Compl.") ¶ 101.) Plaintiffs filed a motion for summary judgment on all claims on October 6, 2011. As discussed above, the FDA provided final responses to both the 1999 Petition and the 2005 Petition on November 7, 2011. (*See* Rec. at 71, 127.) Consequently, on January 6, 2012, Plaintiffs withdrew their claim regarding the FDA's failure to respond to the Petitions as moot.

However, on January 31, 2012, this Court granted Plaintiffs leave to file a supplemental complaint, which Plaintiffs filed on February 1, 2012. The Supplemental Complaint added an additional claim for relief ("third claim for relief"), alleging that the FDA's final responses denying the 1999 and 2005 Citizen Petitions were "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law in violation of the [FDCA], 21 U.S.C. § 360b, and the APA, 5 U.S.C. § 706(2)." (Supplemental Compl. ¶ 38.)

Presently before the Court are the parties' cross-motions for summary judgment on Plaintiffs' third claim for relief.

DISCUSSION

I. *Legal Standard*

A. *Summary Judgment*

A motion for summary judgment may not be granted unless the Court determines that there is no genuine issue of material fact to be tried, and that the facts as to which there is no such issue warrant judgment for the moving party as a matter of law. *See Celotex Corp. v. Catrett,* 477 U.S. 317, 322–23, 106 S.Ct. 2548, 2552–53, 91 L.Ed.2d 265 (1986); *Patterson v. Cnty. of Oneida,* 375 F.3d 206, 219 (2d Cir.2004); *Shannon v. N.Y. City Transit Auth.,* 332 F.3d 95, 98 (2d Cir.2003). The burden of demonstrating the absence of any genuine dispute as to a material fact rests upon the party seeking summary judgment, *see Adickes v. S.H. Kress & Co.,* 398 U.S. 144, 157, 90 S.Ct. 1598, 1608, 26 L.Ed.2d 142 (1970), but once a properly supported motion for summary judgment has been made, the burden shifts to the nonmoving party to make a sufficient showing to establish the essential elements of that party's case on which it bears the burden of proof at trial. *See Hayut v. State Univ. of N.Y.,* 352 F.3d 733, 743 (2d Cir.2003) (citing *Celotex,* 477 U.S. at 322, 106 S.Ct. at 2552). Where, as here, a court considers cross-motions for summary judgment, the court applies the same legal principles and "must evaluate each party's motion on its own merits, taking care in each instance to draw all reasonable inferences against the party whose motion is under consideration." *Make the Road by Walking, Inc. v. Turner,* 378 F.3d 133, 142 (2d Cir.2004) (citations omitted).

Here, the parties do not dispute the essential facts. The only issue before the Court is the legal conclusion resulting from those facts.

B. *Subject Matter Jurisdiction*

Defendants argue that this Court lacks subject

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matter jurisdiction over the FDA's denial of the 1999 and 2005 Citizen Petitions. Specifically, Defendants contend that the FDA's denial of the Petitions was an action "committed to agency discretion by law" and thus outside the scope of judicial review pursuant to the APA. 5 U.S.C. § 701(a)(2).

1. *Legal Standard*

[1][2] Under FDA regulations, the denial of a citizen petition is a final agency action subject to judicial review. *See* 21 C.F.R. § 10.45(d). The Administrate Procedure Act ("APA"), therefore, governs judicial review of the denial of the Petitions. *See* 5 U.S.C. §§ 701–06. Although the APA embodies a "basic presumption of ***331** judicial review," *Reno v. Catholic Soc. Servs., Inc.,* 509 U.S. 43, 57, 113 S.Ct. 2485, 2495, 125 L.Ed.2d 38 (1993), by its terras, the APA does not apply if an "agency action is committed to agency discretion by law." 5 U.S.C. § 701(a)(2). This exception to judicial review is "very narrow" and "applicable in those rare instances where statutes are drawn in such broad terms that in a given case there is no law to apply." *Citizens to Preserve Overton Park, Inc. v. Volpe* (*"Overton Park"*), 401 U.S. 402, 410, 91 S.Ct. 814, 820–21, 28 L.Ed.2d 136 (1971) (internal quotation marks and citations omitted); *accord Drake v. FAA,* 291 F.3d 59, 70 (D.C.Cir.2002). Accordingly, judicial review is precluded "if the statute is drawn so that a court would have no meaningful standard against which to judge the agency's exercise of discretion." *Heckler v. Chaney,* 470 U.S. 821, 830, 105 S.Ct. 1649, 1655, 84 L.Ed.2d 714 (1985); *accord Drake,* 291 F.3d at 70 ("If no such judicially manageable standards are discernable, meaningful judicial review is impossible, and agency action is shielded from the scrutiny of the courts.") (internal quotation marks and citations omitted). In such cases, "the courts have no legal norms pursuant to which to evaluate the challenged action, and thus no concrete limitations to impose on the agency's exercise of discretion." *Drake,* 291 F.3d at 70.

[3][4] "In determining whether a matter has been committed solely to agency discretion, [a court] must consider both the nature of the administrative action at issue and the language and structure of the statute that supplies the applicable legal standards for reviewing that action." *Drake,* 291 F.3d at 70 (internal citation omitted). Enforcement actions are presumptively committed to agency discretion by law and are therefore outside the bounds of judicial review. *See Chaney,* 470 U.S. at 832, 105 S.Ct. at 1656 ("[A]n agency's decision not to take enforcement action should be presumed immune from judicial review under [5 U.S.C.] § 701(a)(2)."). However, this presumption of unreviewability "may be rebutted where the substantive law has provided guidelines for the agency to follow in exercising its enforcement powers[,]" or where "the agency has consciously and expressly adopted a general policy that is so extreme as to amount to an abdication of its statutory responsibilities." *Id.* at 833 & 833 n. 4, 105 S.Ct. at 1656 & 1656 n. 4 (internal quotation marks and citations omitted); *accord Jerome Stevens Pharm., Inc. v. FDA,* 402 F.3d 1249, 1257 (D.C.Cir.2005).

2. *Application*

a. *Enforcement Action*

Although Defendants claim that the decision to institute formal withdrawal proceedings is an enforcement decision, the Court disagrees. First, the provisions of the FDCA at issue in the present case are the substantive regulatory provisions. *See* 21 U.S.C. § 360b. In *Chaney,* which also involved the FDCA, the provisions at issue were enforcement provisions. There, the Supreme Court rejected a challenge to the FDA's denial of a citizen petition requesting that the Agency take a number of enforcement actions, including seizing drugs, adding warning labels to the drugs, and prosecuting all individuals in the chain of distribution who knowingly distributed the drugs for the use in question. *Chaney,* 470 U.S. at 824, 105 S.Ct. at 1651–52. These actions are authorized pursuant to provisions contained within Subchapter III of the FDCA, which is entitled "Prohibited Acts and Penalties" and governs enforcement proceedings.[FN15] In contrast, here, the ***332** action requested by

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withdrawal order). Any withdrawal order must contain an explanation of the findings supporting the order. *See* 21 C.F.R. § 12.120. And here, as in *Massachusetts v. Environmental Protection Agency,* the FDA's decision not to initiate withdrawal of approval of the relevant new animal drugs was a result of the FDA's denial of a petition that the petitioners had a right to bring. *See* 21 C.F.R. § 10.30(b)(2) (explaining the requirements for the submission of a citizen petition and stating that a petition may request that the agency "issue, amend, or revoke an order ...").

Finally, the FDA's own discussion of its decision on the Petitions strongly paints this action as regulatory rather than enforcement. The FDA received more than 38,000 comments on the 1999 Petition, and "the comments and other relevant data and information needed to be evaluated by the Agency before action would be taken." (*See* Rec. at 71.) In its second tentative response to the 1999 Petition, the Agency explained that it would "issue a final response [the 1999 Petition] upon completion of [the Agency's] analysis of the comments received on [the citizen petition], the Framework Document, numerous consultations, and the resolution of the scientific, legal, and policy issues." (Rec. at 66.) This description of the process of reviewing the Citizen Petitions closely mirrors the process of notice-and-comment rulemaking. Furthermore, the Agency rested its denial of the Petitions, in part, on the Agency's decision to pursue a different regulatory strategy. The Agency explained that it had "proposed a different strategy to promote the judicious use of medically important antimicrobials in food-producing animals...." (*See* Rec. at 73, 129.) This statement suggests that the Agency considers withdrawal proceedings one regulatory strategy and the voluntary program embodied in Guidance # 209 another regulatory strategy.

For all the above reasons, the Court finds that initiating the withdrawal of approval of a new animal drug is not an enforcement action.[FN20]

FN20. In any event, if the Court were to find that withdrawal of approval is an enforcement action, the FDA's denial of the Petitions announced a general Agency policy of not pursuing withdrawal proceedings for the subtherapeutic use of antibiotics in food-producing animals. Unlike a specific decision not to enforce, an agency's general policy regarding enforcement is subject to judicial review. *See Crowley Caribbean Transport, Inc. v. Pena,* 37 F.3d 671, 676 (D.C.Cir.1994) ("[A]n agency's statement of a *general enforcement policy* may be reviewable for legal sufficiency where the agency has expressed the policy ... in some form of universal policy statement.") (internal citations omitted) (emphasis in original); *Roane v. Holder,* 607 F.Supp.2d 216, 226–27 (D.D.C.2009) (same). In *Crowley,* the court explained that general enforcement policies are subject to judicial review because they "are abstracted from the particular combinations of facts the agency would encounter in individual enforcement proceedings" and "will generally present a clearer (and more easily reviewable) statement of its reasons for acting when formally articulating a broadly applicable enforcement policy ..." *Crowley,* 37 F.3d at 677. Here, the Agency's denials did not consist of a drug-by-drug analysis and decision not to enforce; rather, in the denial letters, the Agency announced a policy for the regulation of subtherapeutic use of antibiotics in food-producing animals whereby the Agency would not initiate formal withdrawal proceedings and would instead rely on a voluntary program. Such a broad statement of policy is subject to judicial review.

b. *Law to Apply*

[7] Even if the Court were to find that the withdrawal of approval of a new animal ***335** drug is an enforcement action, the FDCA provides sufficient

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"guidelines for the agency to follow in exercising its enforcement powers" to rebut the presumption of unreviewability. *See Chaney,* 470 U.S. at 833, 105 S.Ct. at 1656.

The FDA is charged with regulating drugs sold in interstate commerce. *See* 21 U.S.C. § 393(b). Pursuant to the FDCA, any new animal drug shall be deemed unsafe and "adulterated" unless it is subject to an approved or conditionally approved NADA/ANADA. *See* 21 U.S.C. § 360b(a). The FDA is required to approve a NADA/ANADA unless it finds that grounds for non-approval exist, which include a finding that the drug is not safe. *See* § 360b(c)(1) & (d)(1)(B). Once the FDA approves a NADA/ANADA, both the FDA and the drug applicant have continuing obligations. Drug applicants are required to "establish and maintain indexed and complete files containing full records of all information pertinent to safety or effectiveness of a new animal drug that has not been previously submitted as part of the NADA or ANADA." 21 C.F.R. § 514.80(a)(1). Furthermore, drug applicants "must submit reports of data, studies, and other information concerning experience with new animal drugs to the [FDA] for each approved NADA and ANADA...." *Id.* § 514.80(a)(2). The regulations contemplate third parties producing data relevant to this analysis and require such third parties to "submit data, studies, and other information concerning experience with new animal drugs to the appropriate applicant ... [who], in turn, must report the nonapplicant's data, studies and other information to the FDA." *Id.* The "FDA reviews the records and reports required in [21 C.F.R. § 514.80] to facilitate a determination under [21 U.S.C. § 360b(e)] as to whether there may be grounds for suspending or withdrawing approval of the NADA or ANADA." *Id.* § 514.80(a)(3). Section 360b(e)(1) states that "[t]he Secretary shall, after due notice and opportunity for hearing to the applicant, issue an order withdrawing approval of [a new animal drug application] if the Secretary finds ... that new evidence ... shows that such drug is not shown to be safe...." 21 U.S.C. § 360b(e)(1)(B).

The FDCA and accompanying regulations require the FDA, as part of its regulatory authority, to monitor and evaluate data regarding approved new animal drugs and institute withdrawal proceedings if the data shows that the drugs are no longer shown to be safe. Although § 360b(e)(1) grants the Secretary the discretion to make an initial finding whether a drug is shown to be safe or not, the substance and structure of the FDCA cabin the Secretary's discretion in making that initial decision. Specifically, 21 C.F.R. § 514.80 makes clear that in making initial decisions regarding withdrawal, the Agency is to review the scientific evidence of the drug's safety. This finding is buttressed by 21 U.S.C. § 393(b), which requires the FDA to "promptly and efficiently review[ ] clinical research" and ensure that "veterinary drugs are safe and effective[.]" 21 U.S.C. § 393(b)(1) & (2)(B). The Court is satisfied that § 393(b), § 360b, and the accompanying regulations, which guide the Agency's approval and continued monitoring of new animal drugs, provide sufficient guidelines to allow the Court to review the action challenged in the present case.

Accordingly, the Court finds that there are standards and law to apply and that the FDA's denials of the 1999 and 2005 Citizen Petitions are subject to judicial review.[FN21]

FN21. Several other courts have found that FDA decisions regarding the regulation of approved animal drugs are subject to judicial review. *See A.L. Pharma, Inc. v. Shalala,* 62 F.3d 1484, 1488–89 (D.C.Cir.1995) (reviewing the FDA's refusal to withdraw approval of a new animal drug application after the plaintiff filed a citizen petition with the FDA alleging that the relevant drug application relied on improperly obtained information and should not have been approved according to the FDA's own regulations); *Barnes v. Shalala,* 865 F.Supp. 550, 558 (W.D.Wisc.1994) (holding that the FDA's decision not to require labeling of milk

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products containing recombinant bovine somatotropin (rbST) was subject to judicial review because the plaintiffs were not requesting "the FDA to investigate an unapproved use of [an approved drug]" and instead were asking "only that, as part of the FDA's reconsideration of the safety and effectiveness of rbST, the agency consider whether the approved use of the drug requires labeling").

***336** C. *The Administrative Procedure Act*

[8][9][10] The APA provides that a district court may set aside an agency's findings, conclusions of law, or action only if they are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). "In reviewing agency action, [a] [c]ourt may not 'substitute its judgment for that of the agency.' " *Natural Res. Def. Council v. EPA,* 658 F.3d 200, 215 (2d Cir.2011) (quoting *Overton Park,* 401 U.S. at 416, 91 S.Ct. at 824). Nevertheless, a reviewing court's "inquiry must be searching and careful." *Natural Res. Def. Council, Inc. v. FAA,* 564 F.3d 549, 555 (2d Cir.2009) (internal quotation marks and citations omitted). An agency decision may be deemed arbitrary and capricious "if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered 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," *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.* (*"State Farm"*), 463 U.S. 29, 43, 103 S.Ct. 2856, 2867, 77 L.Ed.2d 443 (1983); *accord Yale–New Haven Hosp. v. Leavitt,* 470 F.3d 71, 79 (2d Cir.2006).

[11] While this standard of review is deferential, courts "do not hear cases merely to rubber stamp agency actions. To play that role would be 'tantamount to abdicating the judiciary's responsibility under the Administrative Procedure Act.' " *Natural Res. Def. Council v. Daley,* 209 F.3d 747, 755 (D.C.Cir.2000) (quoting *A.L. Pharma, Inc. v. Shalala,* 62 F.3d 1484, 1491 (D.C.Cir.1995)); *see also Islander East Pipeline Co., LLC v. McCarthy,* 525 F.3d 141, 151 (2d Cir.2008) ("This is not to suggest that judicial review of agency action is merely perfunctory. To the contrary, within the prescribed narrow sphere, judicial inquiry must be searching and careful.") (internal quotation marks and citations omitted). To be upheld upon judicial review, the agency must have articulated "a rational connection between the facts found and the choice made," *Henley v. FDA,* 77 F.3d 616, 620 (2d Cir.1996) (quotation marks omitted).

D. *Application*

Here, the 1999 and 2005 Citizen Petitions requested that the FDA withdraw approval for certain uses of medically-important antibiotics in food-producing animals. The FDA issued final responses to the 1999 and 2005 Citizen Petitions on November 7, 2011, denying the actions requested. Specifically, while "shar[ing] [petitioners'] concerns about the use of medically important antimicrobial drugs in food-producing animals for growth promotion and feed efficiency indications[,]" (Tr. at 71, 127), the FDA explained that it had decided not to initiate formal withdrawal proceedings for the ***337** medically-important antibiotics implicated in the Petitions, and, instead, was pursuing a voluntary strategy to address antibiotic resistance related to the use of the antibiotics in food-producing animals. (*See* Rec. at 73, 129–30.) In both final responses, the Agency explained that its "experience with contested, formal withdrawal proceedings is that the process can consume extensive periods of time and Agency resources." (*See id.* at 73, 128–29.) The Agency continued: "Recognizing that the process of reviewing safety information for antimicrobial drugs approved before 2003, and pursuing withdrawal proceedings in some cases, would take many years and would impose significant resource demands on the Agency, in June 2010, FDA proposed a different strategy to promote the judicious use of medically important antimicrobials in food-producing animals...." (*See id.* at 73, 129.)

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The Agency went on to describe Draft Guidance # 209, which provides non-binding industry guidance for the judicious use of medically-important antibiotics in food-producing animals.

Essentially, the Agency presented two grounds for denying the Petitions. First, the Agency cited the time and expense required to evaluate individual drug safety and to hold formal withdrawal proceedings if necessary. Second, the Agency emphasized that it had adopted non-binding voluntary measures to promote the judicious use of antibiotics in food-producing animals, which it believed would achieve the same result as formal withdrawal proceedings. Neither of these grounds provides a reasoned justification for the Agency's refusal to initiate withdrawal proceedings.

[12] In responding to a citizen petition, an agency's "reasons for action or inaction must conform to the authorizing statute." *Massachusetts v. EPA,* 549 U.S. at 533, 127 S.Ct. at 1462. Here, the FDCA provides that the Agency's decision whether to initiate formal withdrawal proceedings must be based on an evaluation of the scientific evidence of a drug's safety. *See* 21 U.S.C. § 360b(e)(1)(B). If the evidence demonstrates that a drug is not shown to be safe, the Agency must rescind approval of that drug through formal withdrawal proceedings. *See id.; FDA v. Brown & Williamson Tobacco Corp.,* 529 U.S. 120, 133, 120 S.Ct. 1291, 1301, 146 L.Ed.2d 121 (2000) ("Viewing the FDCA as a whole, it is evident that one of the Act's core objectives is to ensure that any product regulated by the FDA is 'safe' and 'effective' for its intended use.") (internal citations omitted). The statute contains no language indicating that the costs of a withdrawal proceeding—either to the Agency itself or to industry—are to be taken into account when making the decision whether to initiate withdrawal proceedings. Rather, in both approving an initial drug application and determining whether withdrawal is appropriate, the inquiry focuses on whether the drug is safe and effective. *See* 21 U.S.C. § 360b(b)(1)(A) (requiring a new animal drug application sponsor to submit "full reports of investigations which have been made to show whether or not such drug is safe and effective for use"); *id.* § 360b(d)(1) (explaining grounds for the Agency to deny a NADA, including "reports ... do not include adequate tests by all methods reasonably applicable to show whether or not such drug is safe for use ..." or "the results of such tests show that such drug is unsafe for use ... or do not show that such drug is safe for use ..."); *id.* § 360b(e)(1)(B) (requiring the Agency to withdraw approval of a NADA/ANADA if the Agency finds that a drug is "not shown to be safe").

[13] In the instant case, the Agency failed to address the Petitions on their ***338** merits. The Agency did not evaluate the science presented in the Petitions or assess the safety of the relevant drugs. Although the Administrative Record for the 1999 and 2005 Citizen Petitions is more than three thousand pages in length and contains numerous scientific studies of the risks of antibiotic resistance from the use of antibiotics in food-producing animals, the Agency did not address or even mention the scientific evidence in its responses. Further, in its tentative responses to the Citizen Petitions, the Agency stated that "[f]or legal, scientific and resource reasons, withdrawal actions for the petitioned drugs need to be considered on a drug by drug basis. Data and information will need to be reviewed and analyzed for each drug. Thus the petitions can only be granted or denied on a drug by drug basis as reviews are completed and resources permit." (*See* Rec. at 52, 124.) However, the Agency issued its final responses, denying the Petitions, without presenting any evidence—in the denial letters or in the Record—that these drug by drug analyses had been completed or ever undertaken. There is no evidence in the Record that the Agency performed any risk or safety assessments of the petitioned drugs at all. The Agency simply refused to evaluate the drugs' safety on the grounds that if withdrawal proceedings were required they would "take many years" and "impose significant resource demands." FN22 (*Id.* at 73, 12 9.)

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FN22. By not addressing the scientific evidence, the FDA failed to adequately explain why some classes of antibiotics are subject to withdrawal proceedings and not others. For example, in 1977, the Agency issued initial findings that penicillin and tetracycline were not shown to be safe for subtherapeutic use in food-producing animals, and, pursuant to 21 U.S.C. § 360b(e)(1), published notices of an opportunity for hearings in the Federal Register. *See* Penicillin Notice, 42 Fed.Reg. at 43,774; Tetracycline Notice, 42 Fed.Reg. at 56,264. Although these notices were still pending when the Agency denied the Petitions, the Agency did not address—in either the denial letters or the Record—why the evidence demonstrating that penicillin and tetracycline were not shown to be safe did not apply to the other classes of antibiotics implicated in the Petitions. Similarly, in denying the 2005 Petition, the Agency failed to adequately explain why the petitioned antibiotics, which would be classified as "high risk" or "medium risk" under Guidance # 152 and therefore would not receive Agency approval if the subject of a new NADA/ANADA, were not subject to withdrawal proceedings. The Agency fails to provide a reasoned explanation why these drugs should remain on the market, other than the time and expense involved in withdrawing approval. While courts will defer to an agency's scientific expertise, here, the Agency has presented no explanation for its decision to treat penicillin and tetracycline differently than the other classes of antibiotics implicated in the Petitions and no reason why antibiotics that would no longer receive initial approval can nevertheless remain on the market.

Denying the Petitions on the grounds that it would be too time consuming and resource-intensive to evaluate each individual drug's safety, and withdraw approval if a drug was not shown to be safe, is arbitrary and capricious. The Agency did not discuss or appear to consider the controlling statute's governing criteria and overall purpose—whether the drugs at issue pose a threat to human health and, if so, the obligation to withdraw approval for such health-threatening drugs. *See Massachusetts v. EPA,* 549 U.S. at 535, 127 S.Ct. at 1463 (holding that an agency "must ground its reasons for action or inaction in the statute"); *State Farm,* 463 U.S. at 43, 103 S.Ct. at 2867 ("Normally, an agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider...."). The fact that withdrawing approval may be costly or time-consuming is not a sufficient justification, under the ***339** FDCA, for the Agency to abdicate its duty to ensure that the use of animal drugs is safe and effective. Congress has explicitly provided the mechanism to be employed when a drug is found not to be safe. In effect, the FDA is refusing to follow the statutory mandate of withdrawal proceedings on the ground that such proceedings are not effective because they take too long.[FN23] Yet, the Petitions at issue have been pending for thirteen and seven years, respectively. The position that instituting withdrawal proceedings—what the statute mandates—is too time consuming is both ironic and arbitrary. Had the Agency addressed the Petitions in a timely fashion, withdrawal proceedings could have been commenced and completed by now.[FN24]

FN23. One can only wonder what conceding the absence of an effective regulatory mechanism signals to the industry which the FDA is obligated to regulate.

FN24. It is not clear why the withdrawal proceedings must be on a drug-by-drug basis, with individualized research and conclusions as to each drug. There is no evidence that the scientific studies undertaken by various groups and government

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bodies draw different conclusions for different antibiotics. Indeed, the FDA appears to accept that all of the classes of antibiotics at issue pose a similar threat, as its proposed voluntary approach makes no distinction. At most, it appears that the Agency would have to issue eleven different notices of an opportunity for a hearing for the eleven different classes of antibiotics implicated in the Petitions. For example, in 1977, the Agency issued one notice pertaining to penicillin NADAs/ANADAs, *see* Penicillin Notice, 42 Fed.Reg. at 43,774, and one notice pertaining to tetracycline NADAs/ANADAs, *see* Tetracycline Notice, 42 Fed.Reg. at 55, 264, despite the fact that each notice applied to multiple drug products. Moreover, after receiving requests for hearings on the 1977 notices, the Agency indicated that it would hold a single public evidentiary hearing on both the proposed penicillin and tetracycline withdrawals. *See* Penicillin and Tetracycline in Animal Feeds Hearing, 43 Fed.Reg. 53,827, 53,827 (Nov. 17, 1978).

Moreover, the Agency failed to address the Citizen Petitions' request that the Agency withdraw approval of the use of medically-important antibiotics in food-producing animals for the purpose of disease prevention. In the denial letters, the Agency stated that it shared the Petitioners' "concern about the use of medically important antimicrobial drugs in food-producing animals for growth promotion and feed efficiency indications (i.e., production uses)...." (Rec. at 71, 127.) However, the Agency made no mention of the use of medically-important antibiotics for disease prevention in animals. The Agency stated that it did not consider production uses a judicious use of medically-important antibiotics and planned to phase out such uses through the voluntary guidance program. (*See id.* at 72–73, 129.) The voluntary guidance program also requests that other uses of medically-important antibiotics in animals, including use of antibiotics for disease prevention, be available only through a veterinary directive. (*See id.*) The Agency did not respond to the Petitioner's claims that the use of the indicated antibiotics for general disease prevention was not shown to be safe, and did not provide any explanation for its decision to allow the continued use of these drugs for that purpose. This failure to explain the Agency's decision-making is arbitrary and capricious.[FN25] *See* ***340***State Farm,* 463 U.S. at 43, 103 S.Ct. at 2866 ("[T]he agency must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.") (internal quotation marks and citations omitted).

FN25. The Agency did address this issue in Guidance # 209, The Agency explained:

> Some may have concerns that the use of medically important antimicrobial drugs in food-producing animals for disease prevention purposes is not an appropriate or judicious use. However, FDA believes that some indications for prevention use are necessary and judicious as long as such use includes professional veterinary involvement.... When determining the appropriateness of a prevention use, veterinarians consider several important factors such as determining the medical rationale for such use and that such use is appropriately targeted at a specific etiologic agent and appropriately timed relative to the disease. (Ex. A to the Apr. 16, 2012 Barcelo Decl. at 21.) This explanation still fails to address the science indicating that such use could pose a risk to human health.

Plaintiffs contend, with some justification, that the Agency's refusal to evaluate the science was motivated in part by a desire to avoid the statutory requirement of initiating formal withdrawal proceedings for drugs not shown to be safe. Nevertheless, the Agency has all but made a finding that the

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subtherapeutic use of antibiotics in food-producing animals has not been shown to be safe. In the course of this litigation, the Agency has conceded that "the phenomenon of antimicrobial resistance exists, [that] antimicrobial resistance poses a threat to public health, [and that] the overuse of antimicrobial drugs in food-producing animals can contribute to the development of antimicrobial resistance." (*See* Memorandum of Law in Support of the Government's Motion for Summary Judgment on Plaintiff's First Supplemental Complaint at 2.) The Agency has also stated that it "has reviewed the recommendations provided by ... various published reports and, based on this review, believes the overall weight of evidence available to date supports the conclusion that using medically important antimicrobial drugs for production purposes is not in the interest of protecting and promoting the public health." (*See* Rec. at 179.) These statements, while not the equivalent of a finding that triggers a withdrawal proceeding under the FDCA, indicate that the Agency recognizes that these drugs pose a risk (possibly a very serious risk) to human health. However, instead of taking the statutorily prescribed action—making a finding that the drugs are not shown to be safe and initiating withdrawal proceedings—the Agency has pursued a course of action not foreseen by Congress.

Of course, nothing prevents the Agency from seeking voluntary cooperation from the drug industry, in tandem with a notice of intent to withdraw approval. Had it done so years ago, and achieved success, there would be no need for withdrawal proceedings now. But in the instant case, the Agency was presented with two Citizen Petitions, seven and thirteen years ago, respectively, alerting the Agency to the human health risks associated with the subtherapeutic use of antibiotics in food-producing animals.[FN26] In an eleventh hour response, the Agency pointed to a guidance program that encourages industry to use these drugs "judiciously," with no hard evidence that the drug sponsors have agreed or will agreed to the proposed measures. By refusing to make findings as to the drugs' safety—or provide a statutorily based reason for refusing to make such findings—the Agency avoided the Congressionally mandated scheme for addressing drugs not shown to be safe. The Agency may not substitute proposed voluntary measures, such as those embodied in Guidance # 209, for the measures mandated by the statute. *See Natural Res. Def. Council, Inc. v. EPA,* 595 F.Supp. 1255, 1261 (S.D.N.Y.1984) ("It is not an agency's prerogative to alter a statutory scheme even if its assertion is as good or better than the congressional one.") (internal quotation marks and citations omitted).

FN26. The Agency has been aware of the science indicating a human health risk since the early 1970s.

***341** Although the Agency argues that the Court should defer to its decision to implement a voluntary program in lieu of evaluating the safety of the drugs and initiating withdrawal proceedings if necessary, the Court cannot defer because the statute clearly commands a different course of action.[FN27] *See Chevron v. Natural Res. Defense Council, Inc.,* 467 U.S. 837, 842–43, 104 S.Ct. 2778, 2781, 81 L.Ed.2d 694 (1984) ("If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.") Moreover, the Agency has failed to explain the basis for its claim that the voluntary program will more effectively achieve the same results as formal withdrawal proceedings. The Agency points to the time and resources involved in holding public hearings. However, if any credence is to be given to the Agency's position that the drug industry intends to comply with the voluntary program, then it is unclear why the industry would contest formal withdrawal notices or require time consuming hearings. Here, the statutory scheme requires the Agency to ensure the safety and effectiveness of all drugs sold in interstate commerce, and, if an approved drug is not shown to be safe or effective, the Agency must begin withdrawal proceedings.[FN28] The Agency has forsaken these obligations in the name of a pro-

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posed voluntary program, Guidance # 209, and acted contrary to the statutory language.

FN27. The FDA relies on *SEC v. Citigroup Global Markets, Inc.* (*"SEC v. Citigroup"*), 673 F.3d 158, 164 (2d Cir.2012), to support its claim that the Court must defer to an agency's decision to initiate or compromise adversarial proceedings. That case involved the SEC's decision to settle an enforcement proceeding filed in federal court. The court explained that "numerous factors ... affect a litigant's decision whether to compromise a case or litigate it to the end[,] includ[ing] the value of the particular proposed compromise, the perceived likelihood of obtaining a still better settlement, the prospects of coming out better, or worse, after a full trial, and the resources that would need to be expended in the attempt." *Id.* The court further stated that the decision to settle a lawsuit was a "wholly discretionary matter[ ] of policy." *Id.* Here, as discussed extensively in Section IIB, the FDA's decision to initiate withdrawal proceedings is not wholly discretionary. Unlike in *SEC v. Citigroup,* where there was no statutory guidance governing the agency's decision to settle the lawsuit, the FDCA outlines the circumstances under which the FDA may approve an animal drug and the circumstances under which the FDA must withdraw that approval. Moreover, the Court fails to see how the Court's obligation to give substantial deference to an agency decision to settle a single lawsuit relates to the present dispute. The Agency's decision to forego withdrawal proceedings for *all* of the petitioned antibiotics cannot be compared to an agency's decision to settle a single lawsuit.

FN28. The FDA describes the regulatory process in Guidance # 209:

> FDA considers the issue of antimicrobial resistance as part of its human food safety review related to new animal drugs used in food-producing animals. FDA considers an antimicrobial new animal drug to be "safe" if the agency concludes that there is "reasonable certainty of no harm to human health" from the proposed use of the drug in food-producing animals. This standard applies to safety evaluations completed prior to new animal drug approvals, as well as to those completed for drugs after approval. If this safety standard is not met before approval, the drug cannot be approved. If safety issues arise after approval, the [FDCA] provides grounds for withdrawal of approval of new animal drug applications for safety reasons.

Accordingly, the Court finds the Agency's denial of the Petitions to be arbitrary and capricious. For over thirty years, the Agency has been confronted with evidence of the human health risks associated with the widespread subtherapeutic use of antibiotics in food-producing animals, and, despite a statutory mandate to ensure the ***342** safety of animal drugs, the Agency has done shockingly little to address these risks. Now, in responding to this litigation and two Petitions that have been pending for years, requesting that the Agency comply with its statutory mandate, the Agency has refused to make any findings and instead intends to adopt a voluntary program that is outside the statutory regulatory scheme. The adoption of voluntary measures does not excuse the Agency from its duty to review the Citizen Petitions on their merits. The Agency must evaluate the safety risks of the petitioned drugs and either make a finding that the drugs are not shown to be safe or provide a reasoned explanation as to why the Agency is refusing to make such a finding.

The FDA failed to offer a reasoned explanation, grounded in the statute, for its refusal to initi-

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ate withdrawal proceedings, and, therefore, its action was arbitrary and capricious and otherwise not in accordance with law. *Massachusetts v. EPA,* 549 U.S. at 534, 127 S.Ct. at 1463.[FN29]

FN29. Defendants maintain that *Massachusetts v. EPA* is inapposite because it involved an agency's complete refusal to regulate a pollutant. Defendants claim that the present action is distinguishable because FDA is actively regulating the relevant drugs—just not in the manner preferred by Plaintiffs. The Court is not persuaded by this argument. The Court's holding in *Massachusetts v. EPA* was based on the EPA's failure "to comply with [a] clear statutory command." 549 U.S. at 533, 127 S.Ct. at 1462. Similarly, the FDA has failed to comply with its statutory command to evaluate the safety of approved drugs and to initiate formal withdrawal proceedings if the drug is no longer shown to be safe. *See* 21 U.S.C. § 360b(e)(1). Rather than abide by its statutory guidelines when reviewing the Petitions, the Agency failed to evaluate the science presented, failed to make a finding as to the safety of the drugs and drug-uses implicated, and failed to provide a statutorily adequate explanation of why the Agency had declined to make a finding on the drugs' safety. The Agency's response is thus arbitrary, capricious, and not in accordance with law. *See Massachusetts v. EPA,* 549 U.S. at 534, 127 S.Ct. at 1463 ("In short, EPA has offered no reasoned explanation for its refusal to decide whether greenhouse gases cause or contribute to climate change. Its action was therefore arbitrary, capricious, ... or otherwise not in accordance with law.") (internal quotation marks and citations omitted).

CONCLUSION

For the foregoing reasons, Plaintiffs' motion for summary judgment on their third claim for relief is granted and Defendants' motion for summary judgment is denied. The Court remands the matter to the Agency for further proceedings consistent with this Opinion. The Court emphasizes that it is not compelling the Agency to reach a certain conclusion. The Court simply finds that the Agency's proffered grounds for denying the Petitions were arbitrary and capricious.

So Ordered.

S.D.N.Y.,2012.
Natural Resources Defense Council, Inc. v. U.S. Food and Drug Admin.
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NOTICES

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

[Doc. No. LS-02-02]

United States Standards for Livestock and Meat Marketing Claims

Monday, December 30, 2002

***79552** AGENCY: Agricultural Marketing Service, USDA.

ACTION: Notice and request for comments.

SUMMARY: These proposed minimum requirements for livestock and meat industry production/marketing claims, when adopted, will become the United States Standards for Livestock and Meat Marketing Claims. Some segments of the livestock and meat industries make claims to distinguish their products ***79553** from competing products and may request third-party verification by USDA to increase the credibility of their claims. Verification of such claims may be accomplished through examination of the product or through documentation and auditing of the production process. Specifically, USDA is proposing to establish minimum requirements for common production/marketing claims that may be used in voluntary USDA Certified or USDA Verified programs for the livestock and meat industries.

DATES: Comments must be received on or before March 31, 2003.

ADDRESSES: Written comments, suggestions for additional marketing claim standards, and other input may be submitted to Chief, Standardization Branch, Livestock and Seed Program, AMS, USDA, Room 2603-S, Stop 0254, 1400 Independence Avenue, SW., Washington, DC 20250-0254. Comments may also be sent by fax to (202) 720-1112, by electronic mail to: marketingclaim@usda.gov or filed via an on-line form through the AMS, Livestock and Seed Program, Standardization Branch Web site at: http:// www.ams.usda.gov/lsg/stand/claimcomment.htm. Comments should refer to Docket No. LS-02-02. All comments received will be made available for public inspection at the above address during regular business hours (8 a.m.-4:30 p.m.) and will be posted on the Internet at: http:// www.ams.usda.gov/lsg/stand/claim.htm. Copies of these proposed United States Standards for Livestock and Meat Marketing Claims are available through the above addresses or by accessing the Web site at: http:// www.ams.usda.gov/lsg/stand/st-pubs.htm.

FOR FURTHER INFORMATION CONTACT: Chief, Standardization Branch, on 202-720-4486 or Cara L. Gerken, Marketing Specialist on 405-433-5637.

SUPPLEMENTARY INFORMATION: Section 203 (c) of the Agricultural Marketing Act of 1946, as amended, directs and authorizes the Secretary of Agriculture "To develop and improve standards of quality, condition, quantity, grade, and packaging, and recommend and demonstrate such standards in order to encourage uniformity and consistency in commercial practices." USDA is committed to carrying out this authority in a manner that

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facilitates the marketing of agricultural commodities. One way of achieving this objective is through the development and maintenance of voluntary standards by AMS.

Participants wishing to become USDA Verified for marketing claims based on these standards must provide the documentation and records necessary to verify the accuracy of the claims. Since the USDA Verified programs are specific to each participant, a standardized format for the documents and records will not be established.

AMS is proposing the adoption of new United States Standards for Livestock and Meat Marketing Claims, in accordance with procedures published in the August 13, 1997, Federal Register and that are contained in Part 36 of Title 7 of the Code of Federal Regulations (7 CFR Part 36).

Paperwork Reduction Act

This notice codifies industry consensus standards which have been used in "USDA Process Verified" programs under the Quality Systems Certification Program (QSCP). The QSCP is included in the current services of the Meat Grading and Certification Branch in 7 CFR Part 54.4 (63 FR 72102, Dec. 31, 1998). The information collection reporting requirements for those services were approved under Office of Management and Budget (OMB) Control No. 0581-0124, dated June 2, 2000.

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35), the recordkeeping requirements and burden for the Livestock and Meat Marketing Claims Standards will be detailed in another anticipated rulemaking that will establish a new part in the Code of Federal Regulations for a Quality System Verification Program under the LS Program's Audit, Review, and Compliance Branch. AMS intends to have these recordkeeping burden requirements become a part of OMB Control No. 0581-0183. The Livestock and Meat Marketing Claims Standards recordkeeping burden will be incorporated when a request for a revision to and extension of OMB Control No. 0581-0183 is submitted to the Office of Management and Budget.

Background

Since the late 1970's, some livestock and meat industry companies and individual producers have sought USDA services to increase the value of their products (live animals or meat products) by distinguishing them from competing commodity products. Advertising and promotions, which often highlight production and marketing practices, are examples of the methods companies and individuals have utilized to "set their products apart."

Since 1978 the Livestock and Seed (LS) Program has provided certification for a number of claims related to product traits of beef, pork, and lamb carcasses, with or without accompanying claims for breed. Validity was added to the claims because the product was "USDA Certified". Since 1996 the LS Program has offered a verification service to verify claims that cannot be ascertained by direct examination of the product. This verification program allows participants to declare "USDA Verified" for one or more system attributes such as feeding practices, or other pre- and post-harvest processes. Participants must have a documented quality management program covering all aspects of their system and must submit to periodic audits by AMS.

As multiple organizations began to seek USDA verification of the same or similar production practices, the LS Program determined it would be beneficial to establish minimum standards for common production/marketing claims. Certification service requests, along with information obtained during the administration of USDA Verified programs, led the LS Program to develop these proposed United States Standards for Livestock and Meat Marketing Claims. Standardization of these marketing and production claims will permit marketers and pur-

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chasers of these products to make informed decisions by using common trade language.

Many product labels that include these marketing claims must be submitted to the Food Safety and Inspection Service (FSIS), Labeling and Consumer Protection Staff (LCPS), for evaluation prior to use. LCPS is USDA's policy authority on domestic and imported meat, poultry, and egg product labeling, standards, and ingredients. Therefore, the LS Program and LCPS have cooperatively developed these marketing claim standards. Participants whose products or processes do not meet these minimum requirements will not be recognized as USDA Certified or USDA Verified by AMS, and LCPS will not approve labels citing certification of such claims. In addition, LCPS will refer to these standards as guidelines for approval of labels making such marketing claims.

The proposed marketing claim standards may be used in conjunction with existing regulations or voluntary USDA grade standards in USDA Certified and USDA Verified programs. Minimum breed claim criteria shall be established by national breed associations. Since National Pedigreed Livestock Council (NPLC) is the only ***79554** multi-species organization for livestock breed associations, AMS will refer to NPLC members as the designated national breed association. Breed associations that are not members of NPLC may petition AMS for the purpose of establishing a national breed claim program. If a national breed association does not have minimum breed claim criteria, breed claims must be traceable to a parent registered with the national breed association.

Based on LS Program experience with USDA Certified and USDA Verified programs, research into standard practices and procedures, and requests from the livestock and meat industries, AMS identified the need to establish minimum standards for marketing and production claims. In addition to relying on their own expertise, LS Program marketing specialists obtained input from a number of individual experts in government, industry, and academia while drafting these proposed standards and their corresponding thresholds.

AMS is seeking public comment on the following proposed United States Standards for Livestock and Meat Marketing Claims. New participants in USDA Certified or USDA Verified programs will be required to adhere to the United States Standards for Livestock and Meat Marketing Claims immediately. A current participant in USDA Certified or USDA Verified programs, whose system does not comply with these standards, will have 60 days from the final publication of these standards to bring their system into compliance. If a participant fails to bring their system into compliance, AMS will withdraw its USDA Certified or USDA Verified approval and notify LCPS that the basis for their label approval is no longer valid. USDA Certified or USDA Verified program participants who are notified their programs will be withdrawn may submit a written appeal, within 30 days of program withdrawal notification, to the Deputy Administrator, Livestock and Seed Program, AMS. The Deputy Administrator will respond promptly with a written decision which will be final. Unless otherwise noted, these standards apply to cattle, sheep, swine, their carcasses, and meat products.

United States Standards for Livestock and Meat Marketing Claims

Claims Relating to Live Animal Production

Antibiotic Claims—Background: To reduce the risk of antibiotic residues, the Food and Drug Administration (FDA) requires withdrawal of antibiotics from animals for a specified period prior to harvest. Existing antibiotic-residue testing technology can detect residues that exceed the FDA's minimum thresholds. These tests do not have the sensitivity to verify "antibiotic-free" or that no antibiotics were ever administered. After an antibiotic is administered for treatment, the body slowly depletes the traceable residue. "Antibiotic-free" marketing claims are not allowed by LCPS; however, LCPS will allow "no detectable antibiotic residue" claims if the product is

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tested and the science-based test protocol is provided to LCPS. Since some consumers prefer meat products from animals that have not been fed and/or treated with antibiotics and some producers are willing to provide additional assurances of compliance with regulatory requirements, other limited product claims regarding antibiotic treatments are allowed by LCPS. When such antibiotic claims are made, they must be supported by feed formulations, pharmaceutical invoices, or other appropriate documentation, that verifies animals have not received antibiotics in feed or water and whether they have been treated for illness. Procedures for handling sick animals must be documented.

Claim and Standard:

• No antibiotics used, or Raised without antibiotics. —Livestock have never received antibiotics from birth to harvest.

• No subtherapeutic antibiotics added, or Not fed antibiotics." Livestock are not fed subtherapeutic levels of antibiotics. They may receive treatment for illness provided the approved FDA withdrawal period is observed.

• No detectable antibiotic residue (analyzed by "method x").—LCPS requires additional information on the label that clearly informs the consumer/purchaser that the animal may have been treated with antibiotics. Livestock may receive antibiotics during the production phase, provided:

(1) All antibiotics are withdrawn at least 30 days beyond the minimum FDA withdrawal requirement (e.g., if the FDA minimum withdrawal period is 10 days, the minimum withdrawal period for the United States Standard for Livestock and Meat Marketing Claims would be at least 40 days); and,

(2) Livestock and meat products contain no detectible antibiotic residue as verified by statistical sampling analysis using a science-based testing protocol. The specific test protocol and sensitivity of that method must be disclosed ("method x").

Breed Claims.—Claims for breed of livestock must meet criteria established by an AMS-recognized U.S. breed association for the referenced breed. If the breed association does not establish criteria for this claim, animals must be traceable to a parent registered with a breed association.

Free Range Claims—Background: These claims relate to the practice of allowing livestock to have continuous and unconfined access to pasture throughout their life cycle. Producers must verify how livestock are cared for during normal and inclement weather conditions, birthing, or other conditions that would merit special protection. Since some consumers prefer products from animals that have been raised using these production practices, producers may seek to improve their returns by appealing to such market niches.

Claim and Standard:

• Free Range, Free Roaming, or Pasture Raised." Livestock that have had continuous and unconfined access to pasture throughout their life cycle, including:

Cattle *—Shall never be confined to a feedlot.

Sheep *—Shall never be confined to a feedlot.

Swine *—Shall have continuous access to pasture for at least 80% of their production cycle.

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in the livestock raising process by reducing animal stress, mortality rates, shrinkage, and the transition time required to start animals on feed.

Claim and Standard:

• Preconditioned for "x" days (where "x" is the number of days prior to sale/shipping).—Animals for which a preconditioning claim is made must receive the following treatments (as appropriate) at least 45 days prior to their sale/shipment:

(1) Dehorning (when applicable);

(2) Castration (if male);

(3) Vaccinations;

(4) Treatment for control of parasites;

(5) Weaning; and,

(6) Training to eat and drink from feed and water bunks.

Vitamin E Claims—Background: Inclusion of Vitamin E in feed rations, in the form of alpha-tocopheryl acetate, has been shown to improve product color and case life. Promotion of Vitamin E use is limited to livestock producers, packers, and wholesalers. Retail-marketing claims, such as "Vitamin E fed" or "Vitamin E enhanced," are not allowed by FSIS because consumers do not receive a supplemental level of Vitamin E by consuming Vitamin E-fed beef. Animal identification, reviewing feed rations and records, and testing feed samples and muscle tissue samples may be verification elements to support this claim.

Claim and Standard:

• Cattle have been fed supplemental levels of Vitamin E. (Promotion of Vitamin E use is limited to livestock producers, packers, and wholesalers.)—(1) Minimum of 50,000 International Units (IU)/head during feeding period (IU tolerance = +/-15%); (2) Minimum feeding period of 30 days; and, (3) Minimum carcass alpha-tocopheryl acetate concentration from the neck muscle (rectus capiti dorsalis major) not less than 3.2 micrograms ([mu]g) alpha-tocopheryl acetate/gram (g) of tissue. (Alpha-tocopheryl acetate concentration tolerance = +/-15%).

Claims Relating to Product (Meat) Characteristics

Aged Meat Claims—Background: Aging is the process by which meat (carcasses or cuts) is held at a controlled temperature for a specified period, beginning at the time of harvest, to allow enzymatic activity to degrade complex proteins and promote the development of flavor and tenderness. When product is "dry aged" humidity control is also a critical element of the aging process.

Claim and Standard:

• Aged Meat Products.—Type of aging and length of postmortem aging (in days) must be specified. The actual number of days aged and type of aging (dry or wet) may also appear on the retail label.

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Beef.—Must be wet aged for a minimum of 21 days or dry aged for a minimum of 35 days.

Electrical Stimulation Claims—Background: Electrical stimulation improves muscle tenderness by minimizing cold shortening, increasing enzyme activation at higher carcass temperatures (thereby accelerating the aging process), and by physical disruption of muscle fibers through extreme muscle contractions. It further results in an accelerated rate of ***79556** postmortem pH decline as well as an accelerated onset of rigor mortis.

Claim and Standard:

• Electrically Stimulated Beef.—The electrical stimulation applied to the carcass must meet the following minimum requirements:

(1) The cross product of voltage and amperage (voltage multiplied by amperage) must be <== 500; and,

(2) Consist of at least three cycles with a minimum pulse of <== 1.5 seconds "on" and <== 1.0 second "off."

Tenderness Claims—Background: Although individual perceptions vary, for most consumers increased tenderness and juiciness, as well as flavor intensity, contribute to an increase in overall palatability. Of all the palatability attributes, tenderness is the most critical to consumers. Results of objective measurements (e.g., mechanical measures, such as Warner-Bratzler Shear [WBS] or Instron tests) or subjective evaluations (e.g., taste panel scores) can be used to develop quantitative ranking systems which provide a relative level or degree of tenderness. Factors such as degree of doneness, physical size of a sample, and orientation of muscle fibers (among others) can dramatically affect the results of tenderness evaluations. Therefore, specific details of evaluation techniques and conditions used to establish tenderness claims must be fully documented.

Claim and Standard:

• "Company X's" Tender "Species."—A tenderness management system must include at least 3 of the following controlled elements and must be statistically verified (P <= 0.05) to meet an objective tenderness evaluation of a WBS score <= 4.0 kg, using a 1/2 inch (1.27 cm) core, when cooked to 160[deg]F (71 [deg]C).* The objective tenderness evaluation must be revalidated on an annual basis.

Controlled Elements: (1) Genetics; (2) Age of livestock; (3) Feeding management; (4) Electrical stimulation; (5) Aging; (6) Ingredients added to enhance tenderness; (7) Instrument assessment (e.g., validated carcass sorting system, pH values, etc.); or, (8) Mechanical (e.g., blade tenderization, etc.).

* Protocol shall be as established in the 1995 edition of the American Meat Science Association's Research Guidelines for Cookery, Sensory Evaluation, and Instrumental Tenderness Measurements of Fresh Meat. (Available from the National Cattlemen's Beef Association, Centennial, CO.)

Dated: December 20, 2002.

A.J. Yates,

Administrator, Agricultural Marketing Service.

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