NUTRIENT POLLUTION FROM LAND APPLICATIONS OF MANURE: DISCERNING A REMEDY FOR POLLUTION

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INTRODUCTION

The production and processing of food involves byproducts that may create problems if not handled appropriately. Manure, poultry litter, and process wastewater are major byproducts of raising animals for food.[1] Historically, nuisance causes of action were employed to alleviate conditions related to the inappropriate disposal of animal wastes.[2] Common law causes of action, however, did not lead to the cessation of annoyances and discomforts associated with some activities.[3] In a case seeking relief from offensive odors from a poultry slaughtering plant, the Iowa Supreme Court found that the facility was not a nuisance per se, and that it could continue with its operations if it took certain remedial actions to reduce odors.[4] The court observed that the

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1. Federal regulations under the Clean Water Act for animal feeding operations (AFOs) define process wastewater as

> water directly or indirectly used in the operation of the AFO for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other AFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs or bedding.

40 C.F.R. § 122.23(b)(7) (2009).

2. *See, e.g.*, Rowland v. N.Y. Stable Manure Co., 101 A. 521, 522 (N.J. 1917) (abating nuisances coming from the storage of manure); People *ex rel*. Ricks Water Co. v. Elk River Mill & Lumber Co., 40 P. 486, 487 (Cal. 1895) (observing that putting polluting material from hogs directly into water was a nuisance that could be enjoined).

3. *E.g.*, Higgins v. Decorah Produce Co., 242 N.W. 109 (Iowa 1932) (considering a nuisance action against a poultry slaughtering plant).

4. *Id.* at 111-13 (concluding that the noise and offensive odors were less than claimed in the testimony of some of plaintiff's witnesses). This follows earlier precedents that

squeals of pigs and odors arising from chickens do not constitute nuisances.[5] Another case decided that a total injunction of any release of dirty water was too broad.[6] Nuisances could not be precluded unless they caused substantial injury to the party seeking relief.[7] Common law causes of action also generally could not grant relief from a nuisance before injury occurs.[8]

These cases highlight situations where common law remedies did not provide outcomes desired by a majority of the public. Because common law was not precluding egregious polluting activities, Americans turned to their legislatures and sought legislative prohibitions.[9] To address water pollution, Congress enacted the Clean Water Act of 1972.[10] The act precludes discharges of pollutants into navigable waters from point sources without a permit.[11] Under the National Pollutant Discharge Elimination System (NPDES), persons apply to a permitting authority and thereafter can discharge regulated amounts of pollutants into waters.[12] Recognizing that large animal production facilities might be the source of significant pollution, Congress defined point sources to include concentrated animal feeding operations (CAFOs).[13] Pursuant to subsequently adopted regulations, confined animal operations with more than a defined number of animals need NPDES permits.[14] The permitting

encourage the reduction of offensive activities but allow businesses to continue despite the objectionable odors and noise. *See* Ballentine v. Webb, 47 N.W. 485 (Mich. 1890) (affirming a decree that ordered the defendant to refrain from certain actions but allowing the slaughterhouse to continue its operations).

5. *Higgins*, 242 N.W. at 112 (citing Clark v. Wambold, 160 N.W. 1039 (Wis. 1917) and *Ballentine*, 47 N.W. 485).

6. Thompson v. Kraft Cheese Co. of Cal., 291 P. 204, 205 (Cal. 1930) (concerning releases of dirty water from washing floors, machinery, and utensils, together with other pollutants from a cheese manufacturing facility).

7. *Id.* at 206 (concluding that a court in equity may only enjoin acts causing material injury to the plaintiff so that a defendant might continue with discharges that might be objectionable).

8. *See, e.g.*, Rounsaville v. Kohlheim, 68 Ga. 668, 672 (Ga. 1892) (declining to preclude the construction of a livery stable in a city because a nuisance did not yet exist).

9. *See* Jonathan H. Adler & Andrew P. Morriss, *Common Law Environmental Protection*, 58 CASE W. RES. L. REV. 575, 576 (2008) (observing that legislation was enacted due to the "utterly inadequate" common law remedies).

10. Pub. L. No. 92-500, 86 Stat. 816 (1972) (codified at 33 U.S.C. §§ 1251-1387).

11. 33 U.S.C. §§ 1311, 1342 (2006).

12. *Id.*

13. *Id.* § 1362(14).

14. 40 C.F.R. § 122.23 (2009). Large CAFOs with discharges need permits, whereas animal feeding operations below a certain size do not need permits. An AFO [animal feeding operation] is defined as a Large CAFO if it stables or confines as many as or more than the numbers of animals specified in any of the following categories:

(i) 700 mature dairy cows, whether milked or dry;

(ii) 1,000 veal calves;

(iii) 1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;

(iv) 2,500 swine each weighing 55 pounds or more;

requirements of the Clean Water Act have spurred efforts to reduce pollution and have presented controversies about who must have permits and what must be done to reduce discharges of contaminants.[15]

After learning about the harm inflicted by the disposal of hazardous substances at Love Canal and other sites, Congress enacted the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).[16] This act joined the Resources Conservation and Recovery Act of 1976[17] and the Toxic Substances Control Act of 1976[18] in regulating hazardous waste. The federal government was authorized to take actions to clean up, remove, and arrange for remedial action relating to hazardous wastes.[19] Primary goals included protecting public health,[20] promoting the prompt cleanup of hazardous waste sites, and sharing financial responsibility among parties creating the hazards.[21] State common law causes of action were retained,[22] but the federal government could act to protect the public against

(v) 10,000 swine each weighing less than 55 pounds;
(vi) 500 horses;
(vii) 10,000 sheep or lambs;
(viii) 55,000 turkeys;
(ix) 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;
(x) 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
(xi) 82,000 laying hens, if the AFO uses other than a liquid manure handling system;
(xii) 30,000 ducks (if the AFO uses other than a liquid manure handling system); or
(xiii) 5,000 ducks (if the AFO uses a liquid manure handling system).

Id. § 122.23(b)(4).

15. *See, e.g.*, Randall S. Guttery, Stephen L. Poe, & C.F. Sirmans, *Federal Wetlands Regulation: Restrictions on the Nationwide Permit Program and the Implications for Residential Property Owners*, 37 AM. BUS. L.J. 311, 313 (2000) (noting the controversial issue of time and funds necessary to comply with the section 404 permit process); John H. Minan, *Municipal Storm Water Permitting in California*, 40 SAN DIEGO L. REV. 245, 246 (2003) (acknowledging controversies concerning municipal separate storm sewer systems permits); Mark C. Van Putten & Bradley D. Jackson, *The Dilution of the Clean Water Act*, 19 U. MICH. J.L. REFORM 863, 866-94 (1986) (discussing what Congress intended to do in enacting the Clean Water Act and intentions concerning the preservation of high quality waters).

16. Pub. L. No. 96-510, 94 Stat. 2767 (1980) (codified at 42 U.S.C. §§ 9601-9675).

17. Pub. L. No. 94-580, 90 Stat. 2795 (1976) (codified at 42 U.S.C. §§ 6901-6992k).

18. Pub. L. No. 94-469, 90 Stat. 2003 (1976) (codified at 15 U.S.C. §§ 2601-2629).

19. 42 U.S.C. § 9604 (2006).

20. *See* Broward Gardens Tenants Ass'n v. United States, 311 F.3d 1066, 1076 (11th Cir. 2002) (enumerating the protection of public health and the environment as the general objective of CERCLA).

21. *See* S.C. Dep't of Health and Envtl. Control v. Commerce and Indus. Ins. Co., 372 F.3d 245, 251 (4th Cir. 2004) (noting two primary goals of cleanup and sharing financial liability); Duplan Corp. v. Esso Virgin Islands, Inc. (*In re* Duplan Corp.), 212 F.3d 144, 153 (2d Cir. 2000) (noting CERCLA seeks to protect public health).

22. New Mexico v. Gen. Elec. Co., 467 F.3d 1223, 1246 (10th Cir. 2006); *see* City of Tulsa v. Tyson Foods, Inc., 258 F. Supp. 2d 1263, 1289-90 (N.D. Okla. 2003) (allowing the plaintiff to bring public nuisance and trespass claims).

injuries.[23]

Focusing on water pollution, the success of the Clean Water Act in reducing discharges by industrial and commercial point sources of pollutants has elevated the prominence of other sources of pollution, especially agricultural pollution.[24] Agricultural activities that have major impacts on water quality include tillage, fertilizing, manure spreading, pesticides, feedlots, irrigation, clear cutting, silviculture, and aquiculture.[25] Much of this pollution comes from nonpoint sources, and the Clean Water Act does not meaningfully protect the nation's waters from this pollution.[26]

In delineating provisions in the Clean Water Act, Congress "drew a distinct line between point and nonpoint pollution sources."[27] Nonpoint source pollution generally results from land runoff, precipitation, atmospheric deposition, or percolation rather than from a discharge at a specific, single location.[28] Given the absence of an identifiable conveyance of pollutants

23. *See, e.g.*, Lauren Stiller Rikleen, *Negotiating Superfund Settlement Agreements*, 10 B.C. ENVTL. AFF. L. REV. 697, 698 (1982) (identifying the ability of the federal government to take action regarding hazardous waste).

24. *See* National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations, 68 Fed. Reg. 7176, 7179-80 (Feb. 12, 2003) [hereinafter Preamble to the 2003 CAFO regulations] (noting in the preamble that the regulation of nonpoint source pollution was not sufficient to prevent the impairment of water quality by pollutants from the land application of manure); National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations, 66 Fed. Reg. 2960, 2972-73 (proposed Jan. 12, 2001) [hereinafter Preamble to the 2001 Proposed CAFO Regulations] (finding agricultural operations including CAFOs to be a significant source of pollution); Daniel W. Oberle, *Contaminated Sediment Prevention and Remediation: A Need for Consistent Policy and Sound Science*, 3 TOL. J. GREAT LAKES' L. SCI. & POL'Y 26, 46 (2000) (noting the success of reducing discharges from point sources and a redirection of attention to nonpoint sources).

25. EDWIN D. ONGLEY, CONTROL OF WATER POLLUTION FROM AGRICULTURE 10 (1996).

26. The Environmental Protection Agency (EPA) does not have authority to control nonpoint-source discharges through the permitting process governing point sources. Am. Wildlands v. Browner, 260 F.3d 1192, 1194 (10th Cir. 2001); *see also* Or. Natural Desert Ass'n v. Domback, 172 F.3d 1092, 1096 (9th Cir. 1998) (observing that discharges from nonpoint sources are not prohibited by the Clean Water Act); Scott D. Anderson, Comment, *Watershed Management and Nonpoint Source Pollution: The Massachusetts Approach*, 26 B.C. ENVTL. AFF. L. REV. 339, 340 (1999) (observing that underfunding, agency inaction, and political setbacks have contributed to the lack of success in reducing nonpoint source pollution); Robert I. Fassbender, *Reducing Great Lakes Toxics: Can We Do More for Less Through Wastewater Effluent Trading?*, 1 WIS. ENVTL. L.J. 57, 70 (1994) (noting that the lack of meaningful regulation of nonpoint sources of pollution continues to be a problem); J.B. Ruhl, *Farms, Their Environmental Harms, and Environmental Law*, 27 ECOLOGY L.Q. 263, 299 (2000) (concluding the lack of state initiative has precluded meaningful results in reducing nonpoint source pollution).

27. Or. Natural Res. Council v. U.S. Forest Serv., 834 F.2d 832, 849 (9th Cir. 1987) (concluding that effluent limitations of 33 U.S.C. § 1311 did not apply to nonpoint source pollution).

28. *E.g.*, Cordiano v. Metacon Gun Club, Inc., 575 F.3d 199, 220 (2d Cir. 2009) (citing EPA's guidance on nonpoint source pollution).

allowing for a workable method for governmental oversight, nonpoint source pollution is not regulated by the NPDES permitting system.[29] Instead, states have designated areas with substantial water quality control problems,[30] and the U.S. Secretary of Agriculture has established the area-wide waste treatment program incorporating best management practices to control nonpoint source pollution.[31]

CAFOs have been governed for more than thirty years by federal regulatory provisions adopted by the Environmental Protection Agency (EPA),[32] known as the CAFO regulations.[33] Environmental groups have challenged the regulations for being inadequate in a series of lawsuits since the late 1980s.[34] The EPA was ordered to revise its CAFO regulations in 1992,[35] and after considerable study and public input, new rules were adopted in 2003.[36] These were immediately challenged by agricultural and environmental interest groups, leading to a Second Circuit ruling in *Waterkeeper Alliance, Inc. v. Environmental Protection Agency*.[37] Revised federal CAFO regulations were issued in 2008,[38] and these were also challenged.[39]

29. *See* United States v. Earth Sciences, Inc., 599 F.2d 368, 373 (9th Cir. 1989) (evaluating the regulation of mining discharges and concluding that both point and nonpoint source pollution may occur and that point source pollution is subject to federal regulation).

30. 33 U.S.C. § 1288 (2010).

31. *Id.* § 1288(j)(1). Nonpoint source pollution is governed by sections 208 and 319 of the Clean Water Act. *Id.* §§ 1288, 1329.

32. Effluent Limitations Guidelines, 39 Fed. Reg. 5704 (Feb. 14, 1974) (codified as amended at 40 C.F.R. pt. 412); Concentrated Animal Feeding Operations, 41 Fed. Reg. 11458 (Mar. 18, 1976) (codified as amended at 40 C.F.R. pts. 124 & 125).

33. 40 C.F.R. pts. 122 & 412 (2009).

34. *See* Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486, 497 (2d Cir. 2005) (contesting federal CAFO regulations); Johnson County Citizen Comm. for Clean Air and Water v. EPA, No. 3:05-0222, 2005 U.S. Dist. LEXIS 33190, at *9-10 (M.D. Tenn. Sept. 9, 2005) (challenging Tennessee's alleged noncompliance with federal NPDES requirements); Save the Valley, Inc. v. EPA, 223 F. Supp. 2d 997, 1013 (S.D. Ind. 2002) (alleging inadequate state regulation of CAFOs); Natural Res. Def. Council, Inc. v. Reilly, No. 89-2980, 1991 U.S. Dist. LEXIS 5334, at *25-26 (D.D.C. Apr. 23, 1991) (requiring EPA to develop new effluent limitation guidelines for some CAFOs); Tenn. Envtl. Council, Inc. v. Tenn. Water Quality Control Bd., 254 S.W.3d 396, 400 (Tenn. Ct. App. 2007) (analyzing administrative issues concerning a petition to challenge issuance of a permit).

35. Natural Res. Def. Council, 1991 U.S. Dist. LEXIS 5334, at *28.

36. Preamble to the 2003 CAFO Regulations, *supra* note 24, at 7186; *see also* ENVTL. PROT. AGENCY, STATE COMPENDIUM: PROGRAMS AND REGULATORY ACTIVITIES RELATED TO ANIMAL FEEDING OPERATIONS 1 (2002) [hereinafter EPA STATE COMPENDIUM] (delineating an analysis of state efforts to address the environmental and public health problems associated with food animal production).

37. *Waterkeeper*, 399 F.3d at 491.

38. Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines for Concentrated Animal Feeding Operations in Response to the *Waterkeeper* Decision, 73 Fed. Reg. 70418, 70418 (Nov. 20, 2008) [hereinafter Preamble to the 2008 CAFO Regulations].

39. Petition for Review, Nat'l Pork Producers Council v. EPA, No. 08-61093 (5th Cir. Dec. 10, 2008); *see also* CLAUDIA COPELAND, CONG. RESEARCH SERV., WATER QUALITY

Efforts to reduce the impairment of waters by pollutants from food animal production disclose controversy about the rights of agricultural producers to engage in practices that cause water pollution.[40] Regulatory inertia in confronting unacceptable pollution[41] and conflicting beliefs concerning rights to pollute as opposed to rights to pollutant-free waters have interfered with meeting water quality goals.[42] Federal law allows agricultural stormwater discharges accompanying the application of manure to fields,[43] and other agricultural pollutants come from animal production facilities that are not CAFOs[44] and from CAFOs that lack NPDES permits.[45]

Frustrations in the failure of the Clean Water Act to end unacceptable pollution has led proponents of cleaner water to seek other remedies. One is to return to common law nuisance.

A second is to seek response costs for water contamination under the recovery provisions of CERCLA.[46] In 2005, the Oklahoma Attorney General

ISSUES IN THE 111TH CONGRESS: OVERSIGHT AND IMPLEMENTATION 18 (2009) (noting the appellate case).

40. For the proposed CAFO regulations that were adopted in 2003, the EPA received more than 11,000 comments. Preamble to the 2003 CAFO Regulations, *supra* note 24, at 7178; *see also Waterkeeper*, 399 F.3d at 523-24 (remanding to the EPA to definitively select a standard for pathogen reduction and to determine whether water quality based effluent limitations were needed for CAFO discharges).

41. *See* Terence J. Centner, *Courts and the EPA Interpret NPDES General Permit Requirements for CAFOs*, 38 ENVTL. L. 1215, 1217 n.14 (2008) (listing lawsuits seeking to address pollutants from CAFOs).

42. *See, e.g.*, Joseph L. Sax, *The Limits of Private Rights in Public Waters*, 19 ENVTL. L. 473, 475-78 (1989) (noting changes involving water rights where the right to pollute was being curtailed by statutes establishing a right to be free from pollution); *see also* Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1118-20 (1972) (acknowledging that legislatures can assign rights that determine whether persons have a right to pollute or the right to be free from pollution).

43. The Clean Water Act provides an exception so that the term "point source" does not include agricultural stormwater discharges. 33 U.S.C. § 1362(14) (2006). This means that agricultural stormwater discharges can add contaminants to surface waters.

44. Only animal feeding operations with more than the number of animals set forth in the CAFO regulations need NPDES permits. 40 C.F.R. § 122.23(a) (2009).

45. *See* U.S. GEN. ACCOUNTING OFFICE, GAO 03-285, LIVESTOCK AGRICULTURE: INCREASED EPA OVERSIGHT WILL IMPROVE ENVIRONMENTAL PROGRAM FOR CONCENTRATED ANIMAL FEEDING OPERATIONS 3-4 (2003) (recommending that EPA increase its oversight of state CAFO regulations); U.S. GEN. ACCOUNTING OFFICE, GAO/RCED-95-200BR, ANIMAL AGRICULTURE: INFORMATION ON WASTE MANAGEMENT AND WATER QUALITY ISSUES 61 (1995) (finding many unpermitted feedlot operations); Clifford Rechtschaffen, *Enforcing the Clean Water Act in the Twenty-First Century: Harnessing the Power of the Public Spotlight*, 55 ALA. L. REV. 775, 782 (2004) (maintaining that study after study show repeated and flagrant violations of the act); Richard Webster, *Federal Environmental Enforcement: Is Less More?*, 18 FORDHAM ENVTL. L. REV. 303, 314 (2007) (reporting EPA data showing low compliance rates for major discharges).

46. First Amended Complaint ¶¶ 74-75, Oklahoma v. Tyson Foods, Inc., No. 4:05-CV-329-JOE-SAJ, 2005 U.S. Dist. Ct. Pleadings LEXIS 11882 (N.D. Okla. Aug. 19, 2005)

commenced a legal action against Tyson Foods, Inc. and other poultry integrators for water contamination in northeastern Oklahoma under several causes of action, including nuisance and CERCLA.[47] Documentation prepared for *Oklahoma v. Tyson Foods, Inc*. shows multiple legal causes of action offering possibilities for curtailing animal waste contamination.[48]

While the CAFO regulations and CERCLA provisions provide important remedies for reducing pollution, they also express changed values and expectations that affect property rights. Former animal production practices accompanied by pollution may no longer be tolerated as the public demands the cessation of practices causing harm.[49] In defining acceptable agronomic practices, the federal CAFO regulations offer a standard for reasonable manure application: nutrient sufficiency for plant growth.[50] Any deviation from the standard leading to discharges of nutrients into waters may be unreasonable.[51]

Tip O'Neill, former speaker of the House, once declared that "all politics is local."[52] The examination of water pollution from animal production supports this observation. Although Congress has enacted laws making egregious water pollution illegal, exceptions allow polluting activities to occur and some areas may wish to do more to curtail the release of pollutants.[53] To address existing sources of pollution, including contamination accompanying the overapplication of manure, citizens may need to resort to nuisance law.[54] Nuisance is based on unreasonable, annoying, or vexatious conduct, and depends on the locality.[55] In defining discharges for CAFOs, the federal CAFO regulations establish a benchmark for determining what constitutes reasonable

[hereinafter *Tyson Foods* Complaint].

47. *Id.*

48. *Id.* Ten causes of action were advanced in the lawsuit: (1) CERCLA cost recovery, (2) CERCLA natural resource damages, (3) Solid Waste Disposal Act citizen suit, (4) state nuisance, (5) federal nuisance, (6) trespass, (7) violation of state pollution law, (8) violation of state pollution regulations, (9) violation of state administrative code regarding CAFOs, and (10) unjust enrichment. *Id.* ¶¶ 70-147.

49. For example, the 2003 CAFO rules did not require that permitting agencies review nutrient management plans. Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486, 498 (2d Cir. 2005). Due to the *Waterkeeper* decision, the CAFO regulations were amended and now require review. 40 C.F.R. § 122.23(h)(1) (2009) (requiring review of a notice of intent that includes a nutrient management plan).

50. 40 C.F.R. § 122.23(e) (2009).

51. *See infra* notes 22-25 and accompanying text.

52. TIP O'NEILL & GARY HYMEL, ALL POLITICS IS LOCAL: AND OTHER RULES OF THE GAME (1994).

53. *See* Int'l Paper Co. v. Ouellette, 479 U.S. 481, 497 (1987) (noting that the Clean Water Act allows states to impose higher standards on their own point sources than prescribed by federal law).

54. *See* Concerned Area Residents for the Env't v. Southview Farm, 34 F.3d 114, 114 (2d Cir. 1994) (alleging nuisance, negligence, and trespass causes of action regarding liquid manure spreading operations).

55. Garthus v. Sec'y of Health & Human Servs., 847 F. Supp. 675, 691 (D. Minn. 1993) (quoting a dictionary definition of nuisance).

manure application practices. This benchmark might be employed to determine what constitutes the reasonable application of fertilizer permitted under CERCLA. Practices involving manure applications that fail to conform to this benchmark are unreasonable and might be addressed through nuisance lawsuits.

I. THE REGULATION OF MANURE APPLICATION

The federal CAFO regulations differentiate CAFO production areas from land application areas.[56] Production areas are point sources of pollution and, due to the federal regulations, are not able to have any discharges.[57] The fact that CAFO production areas cannot have discharges suggests that the impairment of water quality from the production of farm animals is related to the application of waste to land and nonpoint source pollutants from farm animals.[58] Because land application areas are indispensable parts of CAFO operations, runoff from land application areas under the control of a CAFO owner or operator is regulated by the CAFO regulations.[59] Owners and operators of CAFOs who apply manure, poultry litter, and process wastewater (hereinafter called manure) to land are precluded from discharging pollutants into waters of the United States,[60] except for agricultural stormwater discharges.[61]

A. Agricultural Stormwater Discharges

The Clean Water Act defines the term "point source" so that it "does not include agricultural stormwater discharges and return flows from irrigated agriculture."[62] Agricultural stormwater discharges are not defined by the Act,

56. 40 C.F.R. §§ 122.23(b)(3), (8) (2009).

57. *Id.* §§ 412.15(a), 412.25(a), 412.31(a), 412.43(a)(1), 412.46(a) (prescribing zero discharges from production areas of Large CAFOs but recognizing exceptions).

58. While nonpoint sources of pollution may impair waters, the absence of a permit system for these pollutants means governments and the public are without a meaningful mechanism to address the problem.

59. 40 C.F.R. § 122.23(e) (2009); Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486, 511 (2d Cir. 2005).

60. 40 C.F.R. § 122.21(e) (2009). The discharge of manure, litter, or process wastewater to waters of the United States from a CAFO as a result of the application of that manure, litter, or process wastewater by the CAFO to land areas under its control is a discharge from that CAFO subject to NPDES permit requirements, except where it is an agricultural storm water discharge as provided in 33 U.S.C. 1362(14) (2009). *Id.*

61. An exemption in the Clean Water Act allows CAFOs to have agricultural stormwater discharges from precipitation-related events. 33 U.S.C. § 1362(14) (2009). The Act provides that "[t]he term 'point source' . . . does not include agricultural stormwater discharges and return flows from irrigated agriculture." *Id*; *see also* Preamble to the 2003 CAFO Regulations, *supra* note 2, at 7197-98 (discussing the distinction between discharges regulated by NPDES permits and agricultural stormwater discharges that are not regulated).

62. 33 U.S.C. § 1362(14) (2006).

but the EPA defined this term in the CAFO regulations.[63] To exempt agricultural stormwater discharges as required by statute,[64] the CAFO regulations differentiate between agricultural stormwater discharges and other discharges. The regulations provide that:

> [W]here the manure, litter or process wastewater has been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater, . . . a precipitation-related discharge of manure, litter or process wastewater from land areas under the control of a CAFO is an agricultural stormwater discharge.[65]

This definition of agricultural stormwater discharge was challenged in the *Waterkeeper* case.[66] The Farm Petitioners argued that all discharges from lands of a CAFO, other than production areas, were agricultural stormwater discharges.[67] Environmental Petitioners opposed this argument, claiming that all discharges from lands where CAFO manure has been applied violate the provisions of the Clean Water Act.[68] The *Waterkeeper* court upheld the EPA's provisions on agricultural stormwater as a reasonable interpretation of the Clean Water Act.[69]

The CAFO regulations enumerate four factors for distinguishing agricultural stormwater discharges. First, an agricultural stormwater discharge needs to be the result of a precipitation-related event.[70] Any discharge due to something other than precipitation is not an agricultural stormwater discharge.[71] Second, the CAFO owner or operator must adopt specific

63. 40 C.F.R. § 122.23(e) (2009). Under earlier CAFO regulations, many owners and operators believed that the land application of manure was not regulated by the point-source provisions of the Clean Water Act. *See* Terence J. Centner, *Enforcing Environmental Regulations: Concentrated Animal Feeding Operations*, 69 MO. L. REV. 697, 712 (2004) (discussing the possible explanations for the lack of permits among CAFO owners and operators); *see also* Water Keeper Alliance, Inc. v. Smithfield Foods, Inc., No. 4:01-CV-27-H(3), 2001 U.S. Dist. LEXIS 21314, at *7-8 (E.D. N.C. Sept. 20, 2001) (denying defendants' assertion that the storm event exception meant defendants did not need an NPDES permit).

64. 33 U.S.C. § 1362(14) (2006).

65. 40 C.F.R. § 122.23(e) (2009).

66. Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486, 506-11 (2d Cir. 2005).

67. Brief of Farm Petitioners at 75, Waterkeeper Alliance, Inc. v. U.S. E.P.A. 399 F.3d 486 (2d Cir. June 18, 2004) (No. 03-4470(L)). (citing 33 U.S.C. § 1362(14)).

68. Brief of Environmental Petitioners at 51, Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486 (2d Cir. July 18, 2004) (No. 03-4470(L)).

69. *Waterkeeper*, 399 F.3d at 507-10.

70. In an earlier Second Circuit case, it was manure application on oversaturated fields. Concerned Area Residents for the Env't v. Southview Farm, 34 F.3d 114, 121 (2d Cir. 1994). The Ninth Circuit found that a producer who overapplies or misapplies manure may incur liability for an unpermitted discharge. Community Ass'n for Restoration of the Env't v. Henry Bosma Dairy, 305 F.3d 943, 954 (9th Cir. 2002).

71. *See* 40 C.F.R. § 122.23(e) (2009). This might involve spreading manure so close to a stream or waterbody that pollutants enter waters in the absence of precipitation; *see also*

conservation practices to control runoff from manure being applied to land application areas.[72] Third, manure must be applied following "site specific nutrient management practices that ensure the appropriate agricultural utilization of the nutrients."[73] Finally, since the appropriate utilization of nutrients is based upon the CAFO's nutrient management plan, a CAFO needs to maintain records that document the implementation and management of such a plan.[74]

Under the federal CAFO regulations, CAFO owners and operators adopt nutrient management plans and implement conservation and management practices qualifying their discharges as agricultural storm water discharges.[75] Each NPDES permit delineates land application areas to which manure from the production area may be applied[76] and a nutrient management plan that posits limits on amounts of manure that may be applied to fields based upon sufficient nutrients for agronomic crop production.[77] If a CAFO owner or operator applies more nutrients than necessary for crop growth, the application is contrary to the nutrient management plan and any resulting discharge is in violation of the Clean Water Act.[78]

B. Other Regulatory Issues

With this delineation of regulatory provisions to preclude egregious pollution from the application of manure, three additional issues are important in the regulation of water contaminants from food animal production. First, what oversight must a permitting agency provide with respect to nutrient management plans? Second, to provide greater assurance that regulatory restrictions are being followed, is the public entitled to participate in the permitting process? Finally, the CAFO regulations only apply to large animal production facilities, so contaminants from non-CAFOs will continue to impair our water resources.

Nutrient management plans provide the mechanism that establishes permitted effluent limitations. Given the time required for agency personnel to oversee permit applications, controversies developed about whether a

Concerned Area Residents for the Env't, 34 F.3d at 121 (observing that evidence showed some of the runoff was due to oversaturation of the fields by liquid manure and not rain).

72. 40 C.F.R. § 122.23(e) (2009).

73. *Id.* Provisions on best management practices are also enumerated in the effluent limitation guidelines for CAFOs. *Id.* § 412.4.

74. *Id.* § 122.42(e)(2) (prescribing the maintenance of records).

75. *Id.* § 122.21(l)(x) (requiring a nutrient management plan); *id.* § 122.23(e) (addressing storm-water discharges from the land application of manure); *id.* § 122.42(e) (requiring implementation of a nutrient management plan).

76. *Id.* § 122.23(b)(3). This includes rented acreage. *Id.*

77. *Id.* § 122.42(e)(1).

78. Deviation from a nutrient management plan would be contrary to requirements of the CAFO regulations. *Id.* §§ 122.42(e)(1)(i-ix).

permitting authority needed to review the plans before approving an NPDES permit.[79] The *Waterkeeper* court found that the plans needed to be reviewed by the permitting agency prior to issuing a permit.[80] If nutrient management plans were not reviewed, there was no way to ascertain whether the plans would allow the application of nutrients to achieve realistic production goals while minimizing nitrogen and phosphorus movement to surface waters.[81] Following the *Waterkeeper* decision, the EPA adopted the 2008 CAFO regulations that require nutrient management plans to be reviewed by the permitting agency.[82]

A similar result concerning discharges under a general NPDES permit[83] was reached by a Michigan court in *Sierra Club Mackinac Chapter v. Department of Environmental Quality*.[84] The Sierra Club claimed that Michigan's NPDES provisions were not substantially equivalent to federal regulations.[85] The Michigan permitting agency was authorizing discharges of pollutants without review of any nutrient management particulars.[86] Without agency oversight, a self-regulatory permitting system governs discharges.[87] By allowing discharges without reviewing dischargers' effluent limitations, the agency's authorizations supported the conclusion that the Michigan CAFO regulations were inadequate under federal law.[88]

Another issue has been the ability of the public to participate in the development of effluent limitations.[89] The Clean Water Act specifies minimum

79. Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486, 499 (2d Cir. 2005); Sierra Club Mackinac Chapter v. Dep't of Envtl. Quality, 747 N.W.2d 321, 333 (Mich. Ct. App. 2008); *see also* Centner, *supra* note 41, at 1228 (evaluating approval procedures for allowing discharges for CAFOs under Michigan regulations).

80. *Waterkeeper*, 399 F.3d at 499.

81. *Id.*, 399 F.3d at 499-502; 40 C.F.R. §§ 122.42(e)(1)(viii), 412.4(c)(1) (2009).

82. Preamble to the 2008 CAFO Regulations, *supra* note 38, at 70481 (enumerating review for notices of intent under general permits in 40 C.F.R. § 122.23(h)).

83. The EPA developed regulations enabling permitting agencies to issue permits to large numbers of similarly-situated dischargers under a general permit and a notice of intent. *See* ENVTL. PROT. AGENCY, OFFICE OF WASTEWATER MANAGEMENT, GENERAL PERMIT PROGRAM GUIDANCE (1989), *available at* http://www.epa.gov/npdes/pubs/owm0465.pdf; *see also* Envtl. Def. Ctr. v. EPA, 344 F.3d 832, 881 (9th Cir. 2003) (observing the reduced administrative burden offered by a general permitting program). Through general permits, multiple facilities in a geographical area may be covered under a blanket permit wherein industries are categorized according to similarities in size and the nature of their runoff potential. *See* 40 C.F.R. § 122.48 (2009) (delineating provisions for general permits).

84. *Sierra Club*, 747 N.W.2d at 323 (requiring review by the permitting agency).

85. *Id.* at 332-35.

86. *Id.* at 333.

87 *See* Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486, 498 (2d Cir. 2005) (disapproving of self-regulatory permitting regimes); *Envtl. Def. Ctr.*, 344 F.3d at 854 (considering a self-regulatory system).

88. *Sierra Club*, 747 N.W.2d at 335.

89. *Waterkeeper*, 399 F.3d at 503-04; *Sierra Club*, 747 N.W.2d at 334-35; *see also* Terence J. Centner, *Clarifying NPDES Requirements for Concentrated Animal Feeding Operations*, 14 PENN ST. ENVTL. L. REV. 361, 371-72 (2006) (discussing the public participation deficiencies of the 2003 CAFO regulations).

guidelines for public participation in the development and issuance of effluent limitations:

> Public participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator or any State under this chapter shall be provided for, encouraged, and assisted by the Administrator and the States. The Administrator, in cooperation with the States, shall develop and publish regulations specifying minimum guidelines for public participation in such processes.[90]

Before NPDES permits are issued, the act requires an "opportunity for public hearing."[91]

Both the *Waterkeeper* and *Sierra Club* cases addressed the issue of inadequate opportunity for public participation.[92] The courts concluded that the public was entitled to have an opportunity to review each CAFO's nutrient management plan and to make comments to the permitting authority prior to a final decision to authorize a discharge.[93] In response to the *Waterkeeper* decision, the EPA incorporated new public participation requirements in its revised 2008 CAFO regulations.[94] Agreeing with the *Sierra Club* decision, the 2008 CAFO regulations articulate procedures under which documentation, including the CAFO's nutrient management plan, must be made available for public review for discharges sanctioned under a general permit.[95]

While the CAFO regulations are important for eliminating considerable water contamination from animal operations, the regulations only apply to approximately 15,500 farms with large numbers of animals.[96] Farms with fewer animals than the statutory thresholds do not have point-source pollution and may not have nutrient management plans.[97] More than one million farms with livestock do not need to comply with the nutrient management requirements set forth in the CAFO regulations.[98] Nutrient contamination for

90. 33 U.S.C. § 1251(e) (2006).

91. *Id.* § 1342(a)(1). Moreover, when states are delegated authority to issue permits, the EPA Administrator may approve the state program if the public receives notice of each permit application and is provided "an opportunity for public hearing before a ruling on each such application." *Id.* § 1342(b)(3).

92. *Waterkeeper*, 399 F.3d at 503; *Sierra Club*, 747 N.W.2d at 334.

93. *Waterkeeper*, 399 F.3d at 503; *Sierra Club*, 747 N.W.2d at 334.

94. 40 C.F.R. § 122.23(h) (2009).

95. *Id.*; *see also* Terence J. Centner, *Discerning Public Participation Requirements under the U.S. Clean Water Act*, 15 WATER RESOURCES MGMT. (forthcoming 2010), *available at* http://www.springerlink.com/content/p344456g4k532611/fulltext.pdf.

96. Preamble to the 2003 CAFO Regulations, *supra* note 24, at 7176, 7179. Actually, because the *Waterkeeper* decision requires a discharge before a CAFO must have an NPDES permit, fewer than 15,500 CAFOs need permits. *Waterkeeper*, 399 F.3d at 504-05.

97. The EPA estimated that 238,000 farms qualify as animal feeding operations but only 15,500 are CAFOs regulated under the Clean Water Act. Preamble to the 2001 Proposed CAFO Regulations, *supra* note 24, at 7176, 7179.

98. 40 C.F.R. §§ 122.23(b)(2), (4), (6) (2009) (defining CAFOs).

non-CAFOs is categorized as nonpoint source pollution.[99] The Clean Water Act provides for the identification of waters impaired by nonpoint sources but provides no legal authority to take action to abate nonpoint source pollution.[100] States have provisions concerning nonpoint source pollution, but state efforts have not been very successful in precluding nonpoint source pollution.[101] This means that statutory law does not meaningfully address nutrient pollution from non-CAFOs. Rather, the most likely legal action to address this pollution is a common law remedy such as trespass, negligence, or nuisance.

II. ADDRESSING WATER POLLUTION UNDER CERCLA

Congress enacted CERCLA, a strict liability statute, to impose liability on persons responsible for sites already contaminated with hazardous waste.[102] Health threats posed by formerly deposited hazardous waste justified a federal legislative response to eliminate conditions that were injuring people.[103] CERCLA gives the EPA the power to respond to actual or threatened releases of hazardous substances and enables governments to seek response costs for the removal or remediation of hazardous substances.[104] Governments may also seek contribution for cleanup costs from potentially responsible parties.[105]

Governments have used CERCLA to secure cleanup costs from responsible parties for many sites contaminated by hazardous substances.[106] The Oklahoma Attorney General decided in 2005 that a watershed contaminated by

99. The Clean Water Act does not specifically define nonpoint source pollution, but it can be defined as pollution that does not result from the discharge or addition of pollutants from a point source. Or. Nat. Desert Ass'n v. W. Watershed Project, 550 F.3d 778, 779 (9th Cir. 2008) (citing Or. Nat. Res. Council v. U.S. Forest Serv., 834 F.2d 842, 849 n.9 (9th Cir. 1987)).

100. *See* Mary E. Christopher, *Time to Bite the Bullet: A Look at State Implementation of Total Maximum Daily Loads (TMDLs) Under Section 303(d) of the Clean Water Act*, 40 WASHBURN L.J. 480, 503-04 (2001) (contending that the federal government has no authority for taking action to stop nonpoint source pollution); Ruhl, *supra* note 26, at 298-99 (highlighting the absence of any federal provisions to address nonpoint source pollution).

101. *See* Ruhl, *supra* note 26, at 288 (noting that "[i]n 33 states, nonpoint source pollution is the most significant form of pollution affecting streams and rivers.").

102. Pub. L. No. 96-510, 94 Stat. 2767 (1980) (codified as amended at 42 U.S.C. §§ 9601-9675); *see also* Pakootas v. Teck Cominco Metals, Ltd., 452 F.3d 1066, 1072 (9th Cir. 2006) (delineating the CERCLA statutory framework).

103. *See, e.g.*, Metro. Water Reclamation Dist. of Greater Chi. v. N. Am. Galvanizing & Coatings, Inc., 473 F.3d 824, 826 (7th Cir. 2007) (noting that high profile disasters led Congress to enact CERCLA).

104. 42 U.S.C. § 9607(a) (2006).

105. *Id.*

106. For a case also involving liability for contamination by poultry litter, see City of Tulsa v. Tyson Foods, Inc., 258 F. Supp. 2d 1263 (N.D. Okla. 2003) (ruling on motions concerning CERCLA contamination by a city and poultry processors), *vacated pursuant to settlement*, City of Tulsa v. Tyson Foods, Inc., No. 01CV0900EA(C), 2003 U.S. Dist. LEXIS 23416 (N.D. Okla. July 16, 2003).

phosphorus and phosphorus compounds, nitrogen and nitrogen compounds, zinc and zinc compounds, copper and copper compounds, and arsenic and arsenic compounds should qualify as a site under CERCLA.[107] The Attorney General directed the state of Oklahoma to file the *Tyson Foods* lawsuit against fourteen defendant poultry integrators alleging that they caused injury to the Illinois River Watershed.[108] Various motions about aspects of the case have been heard, and the defendants have filed a motion for summary judgment on the CERCLA causes of action.[109]

Oklahoma claims that the integrators, through their poultry operations, are responsible for poultry waste disposed on lands in the watershed that caused injury to the watershed.[110] The injury involves damages to and the destruction of natural resources in the watershed, including land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other resources.[111] The poultry waste is commonly called poultry litter, which is a mixture of poultry feces and organic bedding material such as wood chips or rice hulls.[112] Oklahoma contends that poultry litter contains hazardous substances.[113] The state wants the integrators to pay for all monetary damages suffered by the state, and to pay the costs and expenses incurred to remedy the wrongful conduct.[114] Oklahoma also seeks a permanent injunction requiring the defendants to abate their pollution-causing conduct.[115]

While Oklahoma advances ten causes of action in the *Tyson Foods* lawsuit,[116] liability under CERCLA, the first two causes of action, is of particular concern.[117] If integrators or poultry producers are liable for damages for contamination from applying poultry litter, this will adversely affect the economics of poultry production. Producers are also concerned that a judge might enjoin the application of poultry litter on fields in an area, thereby

107. *Tyson Foods* Complaint, *supra* note 46, ¶¶ 58-59; 80.

108. *Id.* ¶¶ 1-3. The named integrators are Tyson Foods, Inc., Tyson Poultry, Inc., Tyson Chicken, Inc., Cobb-Vantress, Inc., Aviagon, Inc., Cal-Maine Foods, Inc., Cal-Maine Farms, Inc., Cargill, Inc., Cargill Turkey Production, LLC, George's, Inc., George's Farms, Inc., Peterson Farms, Inc., Simmons Food, Inc., Willow Brook Foods, Inc. *Id.* ¶¶ 6-19.

109. Defendants' Joint Motion for Summary Judgment on Counts 1 and 2 of the Second Amended Complaint ¶ 12, Oklahoma v. Tyson Foods, Inc., No. 05-cv-329-GKF-PJC (N.D. Okla. 2009), [hereinafter *Tyson Foods* Defendants' Motion on Counts 1 & 2].

110. *Tyson Foods* Complaint, *supra* note 46, ¶¶ 31-64.

111. *Id.* ¶ 89.

112. Joint Brief in Opposition of Defendants-Appellees at 12, Oklahoma v. Tyson Foods, Inc., No. 4:05-cv-00329 (N.D. Okla. 2009) [hereinafter *Tyson Foods* Defendant-Appellees' Brief].

113. *Tyson Foods* Complaint, *supra* note 46, ¶ 80.

114. *Id.* at 35. Other relief being sought includes punitive and exemplary damages, statutory penalties, prejudgment interest, attorneys' costs and fees, and disgorgement of all gains the defendants realized in consequence of their wrongdoing. *Id.*

115. *Id.*

116. *Id.* ¶¶ 70-147. *See supra* note 48.

117. *Id.* ¶¶ 70-89.

forcing producers to remove litter to other locations.[118] In 2008, the federal judge rejected a request by Oklahoma to stop releases of poultry litter into the watershed immediately due to an imminent and substantial endangerment to health or the environment.[119] This decision was affirmed on appeal.[120]

CERCLA delineates four elements that need to be proven to establish liability: (1) the site of the contamination is a "facility," (2) the defendant is a "covered person" under the act, (3) a release of hazardous substances comes from a facility, and (4) the release caused the plaintiff to incur response costs that are consistent with the national contingency plan.[121] The most significant questions concerning these elements are whether Oklahoma can establish that defendant-integrators are covered persons under their two CERCLA causes of action and whether the application of poultry litter qualifies under a CERCLA exception so that poultry integrators and producers would not incur liability.

A. Covered Persons

Section 107 of CERCLA defines persons who are covered by the Act.[122] The Act delineates a number of classes of potentially responsible parties with one class involving persons who own or operate a facility at which hazardous substances were disposed of, and another involving persons who by contract or agreement arranged for the disposal of a hazardous substance.[123] In *Tyson Foods*, Oklahoma argues that the poultry integrators either arranged for the litter or are owners or operators when the poultry waste is applied to fields.[124] Defensive pleadings by integrator-defendants suggest that the integrators are not engaged in poultry production and do not deposit litter on lands.[125] Rather, the integrators have production contracts with independent-contractor

118. While litter can be spread on fields, pastures, and other lands, the term "fields" will be used to refer to the land application areas receiving poultry litter.

119. Oklahoma v. Tyson Foods, Inc., No. 05-CV-329-GKF-SAJ, 2008 U.S. Dist. LEXIS 91390 (N. D. Okla. Sept. 29, 2009). Oklahoma based its injunctive relief request on the citizen suit provisions of the Resource Conservation and Recovery Act. 42 U.S.C. § 6973(a)(1)(B) (2006).

120. Oklahoma v. Tyson Foods, Inc., 565 F.3d 769 (10th Cir. 2009). The appellate court found that preliminary injunctive relief was not appropriate given an insufficient link between land-applied poultry litter and bacteria in the watershed. *Id.* at 782.

121. 42 U.S.C. § 9607(a) (2006); *see* Sycamore Indus. Park Assocs. v. Ericsson, Inc., 546 F.3d 847, 850 (7th Cir. 2008) (discussing the attachment of CERCLA liability); Envtl. Transp. Sys., Inc. v. ENSCO, Inc., 969 F.2d 503, 506 (7th Cir. 1992) (evaluating contribution from responsible persons under CERCLA liability).

122. 42 U.S.C. § 9607(a) (2006).

123. *Id.* § 9607(a)(3).

124. *Tyson Foods* Complaint, *supra* note 46, ¶¶ 74-75.

125. Answer and affirmative defenses of defendants Tyson Foods, Inc., Tyson Poultry, Inc., Tyson Chicken, Inc. and Cobb-Vantress, Inc. to the first amended complaint ¶ 1, Oklahoma v. Tyson Foods, Inc., No. 4:05-cv-00329-JOE-SAJ (N.D. Okla. 2005) [hereinafter *Tyson Foods* Answer].

farmers.[126] Under these contracts, the producer-farmers own the land, buildings, implements, and litter.[127]

Given these pleadings, unless additional evidence is adduced to refute the integrators' claims, it is unlikely that Oklahoma can show that the integrators are owners or operators when poultry litter is applied to fields within the watershed. Therefore, Oklahoma's CERCLA claims are dependent on showing arranger liability. Under CERCLA, arranger liability may be imposed on "any person who . . . arranged for disposal . . . of hazardous substances owned or possessed by such person."[128]

Oklahoma alleges that under integrators' production contracts with growers, integrators have substantial control over the production of birds.[129] Integrators retain title to the birds, and may formulate and supply feed that is fed to the birds during the growing process.[130] This means that the integrators own the birds that excrete hazardous substances, and allegedly arrange for litter disposal through production contracts with producers. While integrators never own poultry litter, their birds produce the waste that pursuant to the terms of their production contacts is deposited on fields by producers.[131]

Oklahoma also claims that widespread knowledge of the overabundance of nutrients in fields receiving poultry litter suggests that integrators knew their birds might contribute to a contamination problem.[132] While "knowledge alone is insufficient to prove that an entity 'planned for' the disposal,"[133] if integrators enter production contracts with the intention that the litter be disposed of as a waste, the facts may support liability under CERCLA.[134]

The problem with this argument will be proving it. Integrators are unlikely to make an admission that they knew their birds' excrement was causing contamination; indeed, integrators maintain their producers are using litter as a fertilizer for plant growth.[135] Contracts to produce birds at facilities where fields have sufficient nutrients do not necessarily show an intent to dispose of waste because litter can be transported to other locations. A poultry litter transport program has been used in the Illinois River Watershed to remove litter generated in the watershed to fields in other watersheds.[136] Given these facts

126. *Id.* ¶ 1.

127. *Id.* ¶¶ 1, 32.

128. 42 U.S.C. § 9607(a)(3) (2006).

129. *Tyson Foods* Complaint, *supra* note 46, ¶¶ 74-75.

130. *Tyson Foods* Answer, *supra* note 125, ¶¶ 38-39.

131. *Tyson Foods* Complaint, *supra* note 46, ¶¶ 74-75.

132. *Id.* ¶¶ 48-57.

133. Burlington N. & Santa Fe Ry. Co. v. United States (*Burlington Northern III*), 173 L. Ed. 2d 812, 824 (2009).

134. *See id.* (addressing the meaning of dispose under CERCLA).

135. *Tyson Foods* Defendants' Motion on Counts 1 & 2, *supra* note 109, at ¶ 12.

136. OKLAHOMA CONSERVATION COMMISSION, OKLAHOMA'S NONPOINT SOURCE PROGRAM: 2007 REPORT (2007), *available at* http://www.environment.ok.gov/documents/CWA/GrantWorkplans/NPS%20Annual%20Re

and pleadings, Oklahoma will be hard pressed to elicit evidence that integrators placed birds at facilities knowing the litter would be disposed of on fields that did not need the nutrients for plant growth.[137]

Oklahoma's argument that the integrators are covered persons is based upon a "broader" arranger liability recognized by some courts.[138] Under "broader" arranger liability, transactions that contemplate disposal of wastes may lead an entity to incur liability under CERCLA.[139] Courts have found "a fact-intensive inquiry that looks beyond the parties' characterization of the transaction" is required to determine whether the strict liability imposed by CERCLA applies.[140] Some courts interpreted arranger liability to cover situations where an entity was the source of the hazardous substance but did not manage its disposal.[141]

However, this expansive view of arranger liability is no longer favored. In *Burlington Northern and Santa Fe Railway Co. v. United States*, the Supreme Court rejected a lower court's interpretation of arranger liability.[142] An appellate court had decided that arranger liability included situations in which an entity was the source of hazardous waste.[143] This imposed arranger liability on entities that never managed the disposal of hazardous waste.[144] In reversing the lower court, the Supreme Court interpreted arranger liability to require an "action directed to a specific purpose."[145] Knowledge that some hazardous waste may be wrongfully discarded is not sufficient to show the entity planned for the disposal.[146] When the disposal is a peripheral result of a transaction and efforts were taken to avoid wrongful disposal, the entity does not incur arranger liability.[147]

port/NPS%20Annual%20Report%202007.pdf (last visited Dec. 15, 2009).

137. *Cf.* City of Tulsa v. Tyson Foods, Inc., 258 F. Supp. 2d 1263, 1283 (N.D. Okla. 2003) (finding unanswered questions of whether poultry integrators had sufficient intent to be liable under CERCLA's arranger liability provisions).

138. *See* United States v. Burlington N. & Santa Fe Ry. Co. (*Burlington Northern I*), 502 F.3d 781, 807 (9th Cir. 2007); *rev'd*, *Burlington Northern III*, 129 S. Ct. 1870 (2009); United States v. Burlington N. & Santa Fe Ry. Co. (*Burlington Northern II*), 520 F.3d 918, 948-49 (9th Cir. 2007), *rev'd*, *Burlington Northern III*, 129 S. Ct. 1870 (2009); Basic Mgmt., Inc. v. United States, 569 F. Supp. 2d 1106, 1116-17 (D. Nev. 2008); United States v. Lyon, 2007 U.S. Dist. LEXIS 94329, *11-14 (E.D. Cal. Dec. 14, 2007).

139. *Burlington Northern I*, 502 F.3d at 807-08.

140. *Burlington Northern III*, 129 S. Ct. at 1879.

141. *See Burlington Northern I*, 502 F.3d at 807-08 (finding arranger liability without any management of disposal); *Lyon*, 2007 U.S. Dist. LEXIS 94329, at *20 (declining to dismiss an arranger liability claim).

142. *Burlington Northern III*, 129 S. Ct. at 1879.

143. *Burlington Northern II*, 520 F.3d at 948-49.

144. *Id.* (finding that an entity can be an arranger even if it does not intend to dispose of the product).

145. *Burlington Northern III*, 129 S. Ct. at 1879.

146. *Id.* at 1880.

147. *Id.*

The *Burlington Northern* decision sharply curtails arranger liability. Applying the court's finding to the facts of *Tyson Foods*, the production contracts between integrators and producers do not appear to involve integrators arranging for the disposal of hazardous waste.[148] Unless additional facts surface to show more integrator involvement, the arrangements show integrators' birds as the source of the waste, but the integrators do not exercise control over the management of the litter's disposal.[149] Rather, the independent-contractor producers are solely responsible for arranging the disposal of the litter.[150]

B. CERCLA Exceptions

While the pleadings suggest that the *Tyson Foods* integrators are not covered persons under CERCLA, and therefore cannot be liable for response costs, farmer-producers own and dispose of litter that allegedly is contaminating the Illinois River Watershed.[151] Although producers are not defendants in the *Tyson Foods* lawsuit, the pleadings suggest they could be covered persons under CERCLA.[152] Oklahoma may also be successful in establishing the other elements required for CERCLA liability.[153] Thus, the poultry industry is concerned that producers might incur liability under CERCLA for the release of hazardous substances into a watershed.

CERCLA contains two exceptions under which the application of poultry litter might not constitute a prohibited release of a hazardous substance that creates liability for response costs or damages. The first exception is for federally permitted releases.[154] The second exception is delineated in a statutory provision that says CERCLA releases do not include normal applications of fertilizer.[155] Under one or both of the exceptions, poultry integrators and producers may be able to avoid liability for response costs or damages.

1. Federally Permitted Releases

CERCLA provides that liability for response costs or damages resulting

148. Any nutrient contamination is a peripheral result of the production contract as integrators do not exercise management control over the producer's litter.

149. Tyson Foods Answer, *supra* note 125, ¶¶ 1, 7, 32-36.

150. *Id.* ¶¶ 1, 7.

151. *Id.*

152. Producers own and operate a facility that disposes of a hazardous substance. *See* 42 U.S.C. § 9607(a)(3) (2006).

153. *See supra* note 121 and accompanying text.

154. 42 U.S.C. § 9607(j) (2006); *see also id.* § 9601(10) (2006) (definition of "federally permitted release").

155. *Id.* § 9601(22) (2006).

from qualifying federally permitted releases should "be pursuant to existing law in lieu of this section."[156] Section 101 of CERCLA defines federally permitted releases to include qualifying discharges in compliance with a permit under section 402 of the Clean Water Act.[157] CAFOs are issued NPDES permits under section 402,[158] so a poultry producer who has secured an NPDES permit or a corresponding state permit may qualify to be excused from liability for response costs or damages.[159] Qualification will depend upon showing compliance with the conditions set forth in the permit.[160] Pursuant to the CAFO regulations, NPDES permits delineate effluent limitations under which permittees may apply poultry litter to lands for crop production so long as it is applied pursuant to an approved nutrient management plan.[161] Discharges of nitrogen, phosphorus, and other pollutants from litter applications to fields are allowed for permitted CAFOs so long as the discharges qualify as agricultural stormwater discharges.[162]

Since dry poultry litter was not regulated under the Clean Water Act until 2003,[163] few poultry producers have NPDES permits. Moreover, Oklahoma and Arkansas have proceeded to regulate poultry producers under provisions that are not related to NPDES permits.[164]

156. *Id.* § 9607(j).

157. *Id.* § 9601(10).

> [F]ederally permitted release' means (A) discharges in compliance with a permit under section 1342 of Title 33 [section 402 of the Federal Water Pollution Control Act], (B) discharges resulting from circumstances identified and reviewed and made part of the public record with respect to a permit issued or modified under section 1342 of Title 33 [section 402 of the Federal Water Pollution Control Act] and subject to a condition of such permit, (C) continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 1342 of Title 33 [section 402 of the Federal Water Pollution Control Act], which are caused by events occurring within the scope of relevant operating or treatment systems . . . .

Id.

158. 33 U.S.C.A. § 1342 (West 2008); 40 C.F.R. § 122.23 (2009).

159. *See* 42 U.S.C. § 9607(j) (2006).

160. The permits establish effluent limitations. Any discharge of pollutants beyond what is permitted by the provisions of an NPDES permit would not qualify as a federally permitted release.

161. 40 C.F.R. § 122.21(e) (2009).

> For purposes of this paragraph, where the manure, litter or process wastewater has been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater, as specified in § 122.42(e)(1)(vi)–(ix), a precipitation related discharge of manure, litter or process wastewater from land areas under the control of a CAFO is an agricultural stormwater discharge.

Id.

162. *Id.*

163. Preamble to the 2003 CAFO Regulations, *supra* note 24, at 7176.

164. *See* Oklahoma Registered Poultry Feeding Operations Act, OKLA. STAT. tit. 2, §§ 10-9.1 to -9.12 (1998); Arkansas Soil Nutrient Management Planner and Applicator Certification Act, ARK. CODE ANN. §§ 15-20-1001 to -1008 (2003); Arkansas Soil Nutrient

The Oklahoma legislature enacted the Oklahoma Registered Poultry Feeding Operations Act to address the disposal of poultry litter.[165] Poultry producers are required by the Act to have an animal waste management plan and to employ best management practices in dealing with poultry waste.[166] Poultry producers in nutrient-limited watersheds need to perform an annual soil test on each land application area before the application of poultry waste to determine nutrient needs and application rates.[167] All operators of poultry feeding operations in Oklahoma must attend educational courses on poultry waste handling.[168] For the land application of poultry litter, practices must be based on the litter's nitrogen and phosphorous content and provide controls for runoff and erosion as appropriate for site conditions.[169] However, poultry feeding operations are not CAFOs under these state statutory provisions. Operations may be designated as CAFOs if they violate a provision of the Act or are significant contributors of pollution to state water resources.[170] The Oklahoma legislation regulates the disposal of poultry litter, but producers do not have the equivalent of an NPDES permit.

The Arkansas legislature has enacted four statutes that address poultry production and the disposal of poultry litter.[171] A state nutrient applicator and certification program allows for the certification of persons preparing nutrient management plans[172] and the establishment of limits to preclude the application of nutrients in areas that might negatively impact the waters of the state.[173] The legislation identifies the Illinois River Watershed, the watershed at issue in the *Tyson Foods* lawsuit, as a nutrient surplus area.[174] Applying nutrients within a nutrient surplus area is not allowed "unless the nutrient application is done in compliance with a nutrient management plan."[175] Furthermore, nutrient applications in nutrient surplus areas may only be made by certified nutrient applicators.[176] These provisions regulate the application of

Application and Poultry Litter Utilization Act, ARK. CODE ANN. §§ 15-20-1101 to -1114 (2003).

165. *See* OKLA. STAT. tit. 2, §§ 10-9.1 to -9.12 (1998).

166. *Id.* § 10-9.7 (1998). Best management practices are promulgated by the State Board of Agriculture. *Id.*

167. *Id.*

168. *Id.* § 10-9.5.

169. *Id.* § 10-9.7(C)(5).

170. *Id.* § 10-9.9.

171. *See* Arkansas Poultry Feeding Operations Registration Act, ARK. CODE ANN. §§ 15-20-901 to -906 (2003); Arkansas Soil Nutrient Management Planner and Applicator Certification Act, §§ 15-20-1001 to -1008; Arkansas Soil Nutrient Application and Poultry Litter Utilization Act, §§ 15-20-1101 to -1114; Arkansas Surplus Nutrient Removal Incentives Act, §§ 15-20-1201 to -1206 (2007).

172. ARK. CODE ANN. §§ 15-20-1004 to -1005.

173. *Id.* § 15-20-1102.

174. *Id.* § 15-20-1003(10).

175. *Id.* § 15-20-1106(a).

176. *Id.* § 15-20-1106(d)(1).

poultry litter but do not constitute an NPDES permit.

Given the lack of NPDES permits among poultry producers in Oklahoma and Arkansas, the CERCLA permit defense will not offer much if any protection for contamination damages that have occurred in the Illinois River Watershed. However, the permit defense does offer poultry producers an opportunity to obtain an NPDES permit and qualify for an exception against CERCLA response and damage costs.

2. Application of Litter as Fertilizer

A second exception for poultry integrators and producers that might thwart liability for CERCLA response costs or damages is the CERCLA exception for the normal application of fertilizer.[177] The statutory definition of "releases" enumerates an exception saying "the normal application of fertilizer" is excluded from being a release under CERCLA.[178] This implies that persons applying reasonable amounts of fertilizer for plant growth are not engaged in a release that leads to liability for response costs or damages.

CERCLA does not define fertilizer and neither do the accompanying regulations.[179] However, it has been recognized that through appropriate husbandry practices, poultry producers can recycle nutrients contained in poultry litter as fertilizer for crop growth.[180] Applying manure on land for crop production "is the most desirable method of utilizing manure because of the value of the nutrients and organic matter."[181] The land application of manure "fosters the reuse of the nitrogen, phosphorus, and potassium in these wastes for crop growth."[182] In formulating the 2003 CAFO regulations, the EPA noted that manure's nutrients, organic matter, and micro-nutrients are "beneficial to crop production when applied appropriately."[183]

177. *See* 42 U.S.C. § 9601(22)(D) (2006).

178. *See id.*

179. *See* City of Tulsa v. Tyson Poultry, Inc., 258 F. Supp. 2d 1263, 1287 (N.D. Okla. 2003) (acknowledging that CERCLA does not define the normal application of fertilizer but that the exclusion needs to be narrowly construed).

180. *See, e.g.*, A.A. Araji, Z.O. Abdo, & P. Joyce, *Efficient Use of Animal Manure on Cropland: Economic Analysis*, 79 BIORESOURCE TECH. 179, 179 (2001) (citing extensive research on the benefits of applying manure to cropland).

181. Marc Ribaudo, *Managing Manure: New Clean Water Act Regulations Create Imperative for Livestock Producers*, AMBER WAVES, February 2003, *available at* http://www.ers.usda.gov/Amberwaves/Feb03/Features/ManagingManure.htm; *see also* NOEL GOLLEHON ET AL., U.S. DEPT. AGRIC. ECON. RESEARCH SERV., AGRIC. INFO. BULLETIN. NO. 771, CONFINED ANIMAL PROD. AND MANURE NUTRIENTS (2001) (noting that manure provides organic material and nutrients for crop growth).

182. EPA STATE COMPENDIUM, *supra* note 36, at 13; *see also* Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486, 494 (2d Cir. 2005) (citing EPA Compendium).

183. Preamble to the 2003 CAFO Regulations, *supra* note 24, at 7212 (acknowledging the use of manure as a fertilizer for crop production, but noting that applications need to be site-specific to ensure appropriate utilization of nutrients); *see also* J. O. Bukenya et al.,

The integrator-defendants have raised the fertilizer exclusion as a defense in *Tyson Foods*.[184] However, Oklahoma claims that the exception does not apply because poultry litter is being overapplied to fields in the watershed as a waste.[185] Thus, while there is overwhelming support for concluding that poultry litter can be applied as a fertilizer, it is not clear that all of the applications by producers in the watershed are being applied as fertilizer.[186] Due to the expense of transporting litter to land that is not close to the production facility, producers find it economical to apply litter on nearby fields.[187] This may result in the overapplication of litter, and is an example of short-term profitability objectives interfering with long-term environmental quality.[188]

The legislative history of CERCLA supports a conclusion that the overapplication of fertilizer does not qualify for the fertilizer exclusion.[189] In developing the 2003 CAFO regulations, the EPA acknowledged that overapplication of manure was a problem that needed to be addressed.[190] The differentiation of agricultural stormwater discharges from other discharges depends on each NPDES permittee following a nutrient management plan that precludes application of manure that would provide nutrients beyond what are necessary for crop production.[191] This suggests that qualification for the fertilizer exclusion will depend on proof that producers only applied sufficient nutrients for crop production.

A conclusion that CERCLA distinguishes between normal and abnormal applications of poultry litter as fertilizer to determine liability is a reasonable interpretation of the fertilizer exclusion.[192] A similar exclusion for petroleum

Economic Feasibility of Substituting Fresh Poultry Litter for Ammonium Nitrate in Cotton Production, 16 J. SUSTAINABLE AGRIC. 81, 82 (2000) (noting that poultry litter is an effective fertilizer when nutrients of the litter are matched with crop needs).

184. *Tyson Foods* Answer, *supra* note 125, ¶ 30; *Tyson Foods* Brief for the Defendant-Appellee, *supra* note 112, at 12.

185. *Tyson Foods* Defendants' Motion on Counts 1 & 2, *supra* note 109, ¶¶ 15-21.

186. The USDA estimated that cropland controlled by CAFO owners and operators only had the assimilative capacity to absorb about forty percent of the nitrogen generated by the operations. Preamble to the 2001 Proposed CAFO Regulations, *supra* note 24, at 2975.

187. Ribaudo, *supra* note 181 (noting the weight of manure makes it expensive to move distances).

188. *See, e.g.*, W.L. Kingery et al., *Impact of Long-Term Land Application of Broiler Litter on Environmentally Related Soil Properties*, 23 J. ENVTL. QUALITY 139, 146 (1994) (recommending that guidelines for the land application of litter be developed to maximize "agricultural productivity and maintenance of environmental quality").

189. S. REP. NO. 96-848, at 46 (1980).

190. Preamble to the 2003 CAFO Regulations, *supra* note 24, at 7180-81 (noting that inadequate land areas for applying manure at some CAFOs contribute to nutrient contamination).

191. 40 C.F.R. §§ 122.23(e), 122.42(e)(1) (2009).

192. *See* City of Tulsa v. Tyson Foods, Inc., 258 F. Supp. 2d 1263, 1287 (N.D. Okla. 2003) (acknowledging the fertilizer exclusion but stating that allegations of overapplication precluded summary judgment), *vacated pursuant to settlement*, 2003 U.S. Dist. LEXIS

has been considered by courts. Petroleum is excluded from CERCLA's definition of hazardous substances.[193] However, petroleum altered from its virgin state has been found to no longer qualify under the petroleum exclusion.[194] Moreover, used oil also does not qualify for the exclusion.[195] The petroleum cases suggest that poultry litter applied for crop production is a fertilizer and should qualify for the CERCLA fertilizer exclusion. Nevertheless, if litter is applied incorrectly or is overapplied to a field, the litter would not qualify for the exclusion.

Forty states have enacted regulations requiring the application of CAFO wastes to land at agronomic rates.[196] Both Oklahoma and Arkansas, the two states in the watershed allegedly contaminated by the *Tyson Foods* defendants, have special rules governing the application of poultry litter.[197] As previously noted, these rules preclude the overapplication of poultry litter.[198] A violation of these rules means that litter is not being used as a fertilizer.[199] State rules impose other restrictions, such as precluding the application of litter when the ground is saturated or frozen.[200] All of a state's requirements concerning the use of manure might be considered part of "the normal application of fertilizer."

In its action for damages and response costs under CERCLA, Oklahoma will need to prove that the defendants overapplied manure and so should incur liability.[201] Oklahoma might also adduce evidence that producers did not comply with other state-recognized practices that are part of good husbandry when using litter as a fertilizer. For defendants' joint motion for summary judgment on counts one and two of the second amended complaint, the defendants need to show that poultry litter was applied reasonably as a fertilizer

23416 (N.D. Okla. July 16, 2003). The settlement of the lawsuit included a moratorium on the application of poultry litter in the watershed. *Id.* at *3.

193. 42 U.S.C. § 9601(14)(F) (2006) ("The term [hazardous substance] . . . does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance").

194. Esso Standard Oil Co. v. Perez, No. 01-2012, 2004 U.S. Dist. LEXIS 19954, at *36 (D.P.R. Oct. 1, 2004) (finding that the co-defendants had not qualified for the petroleum exclusion).

195. Darton Corp. v. Uniroyal Chem. Co., 917 F. Supp. 1173, 1183 (N.D. Ohio 1996) (concluding that used oil was a hazardous waste).

196. EPA STATE COMPENDIUM, *supra* note 36, at 7-10, 13 (noting that some of these states evaluate the nitrogen needs of crops to calculate agronomic rates). Evaluation of nitrogen needs may allow for overapplication of phosphorus.

197. ARK. CODE ANN. §§ 15-20-1001 to -1008, 15-20-1101 to -1114 (2008); OKLA. ADMIN. CODE §§ 35:17-5-1 to -11 (2008); OKLA. STAT. tit. 10, §§ 9.1-9.12 (2008); ARK. NATURAL RES. COMM. R. 2101.1-2108.1, 2201.1-2206.4 (2008).

198. *See supra* notes 165-176 and accompanying text.

199. A practice violating government policy should not be considered normal.

200. *E.g.* ARK. NATURAL RES. COMM. R. 2202.4(C) (2008).

201. *See Tyson Foods* Complaint, *supra* note 46.

for plant growth.[202] Proof of normal application of fertilizer involves evidence that all litter was applied according to a nutrient management plan under which the nutrients of the litter were required for plant growth and crop production.[203] Such evidence would require documentation of nutrient testing of soils and litter, and computerized programs showing the amounts of litter applied were calculated to provide for the nutrient needs of the crop being produced.[204]

III. DELINEATING A CAUSE OF ACTION IN NUISANCE

The NPDES permitting provisions and the CERCLA prohibition against releases are strict liability provisions: persons who fail to conform to the statutory requirements are liable.[205] Nevertheless, do the statutes also provide guidance in describing social norms? Do the provisions involving agricultural stormwater discharges posit societal directives concerning the reasonableness of applying manure to fields? One might conclude that the regulatory dictates support a finding that it is unreasonable for producers who are not governed by the Clean Water Act's point source provisions to overapply manure.[206] As previously noted, one million farms are raising livestock that do not have to abide to the requirements of the CAFO regulations.[207] Securing relief for neighbors from pollution problems from these producers depends on common

202. *See Tyson Foods* Defendants' Motion on Counts 1 & 2, *supra* note 109.

203. *See* City of Tulsa v. Tyson Foods, Inc., No. 01-CV-0900EA, 2003 U.S. Dist. LEXIS 23416, at *3-6 (N.D. Okla. July 16, 2003) (delineating a settlement precluding the application of poultry litter in the watershed unless a nutrient management plan had been issued and a risk-based phosphorus index adopted).

204. Such documentation is required for NPDES permits. 40 C.F.R. § 122.42(e)(1)(vii) (2009) (requiring testing of manure and soil). Arkansas requirements preclude land applications of poultry litter in nutrient surplus areas above a certain rate to provide "for proper crop utilization and prevention of significant impact to waters. . . ." ARK. NATURAL RES. COMM. R. § 2201.4 (2010); *see also* ARK. CODE ANN. §§ 15-20-1102, 15-20-1108(c)(1)(A) (2008). The Oklahoma Registered Poultry Feeding Operations Act also requires "[t]he calculations and assumptions used for determining land application rates" and "nutrient analysis data, for soil and poultry waste testing." OKLA. STAT. tit. 10, § 9.7(C)(2)-(3) (2008); *see also* OKLA. ADMIN. CODE § 35:17-5-5 (2008) (augmenting the statutory requirements for animal waste management).

205. *See, e.g.*, United States v. Township of Brighton, 153 F.3d 307, 330 (6th Cir. 1998) ("Congress's strict liability scheme 'creates a strong incentive both for prevention of releases and voluntary cleanup of releases by responsible parties.'" (quoting 126 Cong. Rec. 26, 338 (1980))); United States v. Pozsgai, 999 F.2d 719, 725 (3d Cir. 1993) (noting that unpermitted discharges in violation of the Clean Water Act subjects the discharger to strict liability); Dedham Water Co. v. Cumberland Farms Dairy, 889 F.2d 1146, 1152 (1st Cir. 1989) (acknowledging the legislative history of CERCLA as providing for strict liability for releases of hazardous substances).

206. *See* Thomas C. Buchele, Note, *State Common Law Actions and Federal Pollution Control Statutes: Can They Work Together?*, 1986 U. ILL. L. REV. 609, 629 (advocating that actions violating federal pollution standards should be found to be unreasonable under common law).

207. *See supra* note 98 and accompanying text.

law.

Prior to the Clean Water Act and CERCLA, common law remedies were employed to seek relief from egregious polluting activities.[208] While statutory laws provide causes of action against persons discharging contaminants into the air, into the water, and onto the land, aggrieved persons retain the ability to sue for trespass, negligence, and nuisance. In the *Tyson Foods* lawsuit, the plaintiffs have alleged that the overapplication of poultry litter is a nuisance.[209] An earlier court pronouncement suggests that failure to follow best management practices in the application of poultry litter may create a nuisance.[210] An examination of the nuisance allegations and defenses in *Tyson Foods* suggests that a nuisance cause of action may justify judicial relief.

A. Statutory Preemption

An initial question is whether the Clean Water Act and CERCLA preempt nuisance causes of action. Although Congress never explicitly provided that either of these laws preempts nuisance, the courts have limited nuisance lawsuits under federal common law with respect to pollutants governed by the NPDES permitting program of the Clean Water Act.

The major case announcing the preemption of federal common law nuisance is *City of Milwaukee v. Illinois*.[211] The State of Illinois alleged that Milwaukee created a public nuisance under federal common law by allowing inadequately treated sewage to be discharged into Lake Michigan.[212] The city's major defense was that the federal nuisance cause of action concerning its discharges was preempted by the Clean Water Act.[213] The Supreme Court found that the Act left no room for courts to attempt to improve on the federal program of water pollution regulation.[214] This meant that federal common law could not be used to supplement the Clean Water Act's regulation of point sources of pollutants. Due to the complexity of water pollution control, the court deferred to Congress's program whereby the EPA would administer the Act.[215]

While the *City of Milwaukee* case answered the question of statutory preemption of federal common law nuisance, plaintiffs also may allege a

208. *See supra* notes 2-8 and accompanying text.

209. *Tyson Foods* Complaint, *supra* note 46, at Counts 4 & 5.

210. City of Tulsa v. Tyson Foods, Inc., 258 F. Supp. 2d 1263, 1296 (N.D. Okla. 2003) (evaluating claims for the contamination of water supplies).

211. City of Milwaukee v. Illinois, 451 U.S. 304 (1981).

212. *Id.* at 311.

213. Illinois v. City of Milwaukee, 599 F.2d 151, 157, 162 (7th Cir. 1979) (finding that the Clean Water Act did not preempt federal common law), *vacated*, 451 U.S. 304 (1981).

214. *City of Milwaukee*, 451 U.S. at 318.

215. *Id.* at 325.

nuisance under state law.[216] In *International Paper Co. v. Ouellette*, the Supreme Court addressed the issue of preemption of state law and reached a different conclusion.[217] The court observed that the Clean Water Act recognizes that states have a significant role in protecting their water resources.[218] States also are able to enact more stringent discharge limitations.[219] Although the Act preempted federal common law, its savings clause specifically preserves state actions.[220] Given Congress's statutory directives, the Supreme Court found that allowing the common law of the state where the pollution was generated to establish pollution limitations would not frustrate the goals of the Clean Water Act.[221] Therefore, state common law nuisance actions against point sources of pollutants are possible.[222]

Under CERCLA, the statutory savings clause has been interpreted to preserve state actions.[223] However, there are limitations on recoveries in circumstances where a conflict exists with federal law.[224] The allegations of nuisance in *Tyson Foods* against poultry integrators are not preempted by CERCLA.

B. Delineating a Nuisance

Under the Clean Water Act, CAFOs are point sources of pollution and can have agricultural stormwater discharges.[225] The judiciary has interpreted statutory agricultural stormwater discharges as requiring manure applications to be based on site-specific nutrient management practices that ensure appropriate agricultural use of the nutrients for plant growth.[226] Through nutrient management plans enumerating effluent limitations, permittees show how their applications of manure achieve production goals while minimizing nutrient

216. The pleadings allege both a federal common law nuisance and a state law nuisance. *Tyson Foods* Complaint, *supra* note 46, Counts 4 & 5.

217. Int'l Paper Co. v. Ouellette, 479 U.S. 481, 497 (1987).

218. *Id.* at 489 (citing 33 U.S.C. § 1251(b)).

219. *Id.* at 490 (citing 40 C.F.R. § 123.25(a)).

220. 33 U.S.C. § 1370 (2006); *see also Int'l Paper*, 479 U.S. at 497.

221. *Int'l Paper*, 479 U.S. at 498.

222. Jason J. Czarnezki & Mark L. Thomsen, *Advancing the Rebirth of Environmental Common Law*, 34 B.C. ENVTL. AFF. L REV. 1, 8-9 (2007); Robert V. Percival, *The Clean Water Act and the Demise of the Federal Common Law of Interstate Nuisance*, 55 ALA. L. REV. 717, 767 (2004).

223. 33 U.S.C. § 9652(d) (2006); *see* New Mexico v. Madrid, 467 F.3d 1223, 1246 (10th Cir. 2006); New York v. Shore Realty Corp., 759 F.2d 1032, 1050-52 (2d Cir. 1985); *see also* Alexandra B. Klass, *Common Law and Federalism in the Age of the Regulatory State*, 92 IOWA L. REV. 545, 570 n.143 (2007) (identifying cases addressing preemption by various federal environmental statutes).

224. Czarnezki & Thomsen, *supra* note 222, at 10-11.

225. *See supra* notes 62-78 and accompanying text.

226. *See, e.g.*, Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486, 507-11 (2d Cir. 2005) (evaluating permitted stormwater discharges as allowed under the 2003 CAFO regulations).

movement to surface waters.[227] By precluding discharges related to the overapplication of manure, the CAFO regulations suggest that failure to follow a nutrient management plan when applying manure to fields is unreasonable.

The definition of agricultural stormwater discharges prescribes a practice that might enunciate a standard for the land application of manure.[228] Property owners have the right to apply manure on lands for crop production, but do not have the right to apply quantities that would provide an excess of nutrients beyond what is needed for crop growth.[229] If too much manure is applied, causing harm and inconvenience to others, it is contrary to community standards. Placing too many nutrients on land is not an acceptable agronomic practice. The unreasonableness of this practice and its contribution to water pollution may cause it to be a nuisance.[230] Under nuisance law, interferences with the enjoyment of the use of property enable courts to grant equitable relief such as injunctive orders or damages.

The overapplication of nutrients may violate state law.[231] While a court may not find the application of litter to constitute a *per se* statutory violation,[232] if the allegations in the *Tyson Foods* lawsuit are believed, they would be sufficient to establish a nuisance.[233] Because integrators own the birds creating the nuisance, there may be sufficient connection to hold them

227. 40 C.F.R. §§ 122.42(e)(1)(viii), 412.4(c)(1) (2009). Permittees who fail to follow nutrient management plans incur liability for violating the federal CAFO regulations. *Id.* § 122.21(e); *See also, e.g.*, United States v. New Portland Meadows, Inc., No. 00-507-AS, 2002 U.S. Dist. LEXIS 19153, at *6-8, *24 (D. Or. July 31, 2002) (finding liability for violating conditions of a permit by a CAFO).

228. A similar argument was rejected by a federal district court in Louisiana. Albert v. Conagra Foods, Inc., No. 04-1611, 2009 U.S. Dist. LEXIS 9084, at *11-16 (E.D. La. Feb. 6, 2009) (evaluating Louisiana law to conclude that there was insufficient proof to establish that a breach of environmental laws on an occasional basis was relevant to a determination of generally accepted agricultural practices).

229. The EPA noted that excess nutrients from CAFOs were an environmental concern. Preamble to the 2003 CAFO Regulations, *supra* note 24, at 7180.

230. *See, e.g.*, Tory H. Lewis, Note, *Managing Manure: Using Good Neighbor Agreements to Regulate Pollution from Agricultural Production*, 61 VAND. L. REV. 1555, 1570 (2008) (noting the difficulty of distinguishing between reasonable practices and those that are a nuisance).

231. Oklahoma alleges in the *Tyson Foods* lawsuit that the defendants have violated Section 10-9-7 of the Oklahoma Statutes and Section 35:15-5-5 of the Oklahoma Administrative Code. *Tyson Foods* Complaint, *supra* note 46, at Count 8. For application of poultry litter in Arkansas, a violation would occur under Arkansas Law. ARK. CODE ANN. § 15-20-1106(a) (2008).

232. *See* City of Tulsa v. Tyson Foods, Inc., 258 F. Supp. 2d 1263, 1291 (N.D. Okla. 2003) (rejecting the argument that violation of statute and administrative code created a nuisance *per se*).

233. *See* Donald M. Warren, Case Note, *City of Tulsa v. Tyson Food: CERCLA Comes to the Farm—But Did Arranger Liability Come with It?*, 59 ARK. L. REV. 169, 177-78 (reporting the conclusions of the *City of Tulsa* lawsuit with respect to a nuisance cause of action).

liable for a nuisance.[234] Integrators who knowingly enter contracts with producers where excess litter is being overapplied to lands might be vicariously liable under nuisance law.[235]

C. State Anti-Nuisance Defenses

A plaintiff alleging that the overapplication of manure is a nuisance may need to overcome a state anti-nuisance statutory defense.[236] All fifty states have enacted right-to-farm laws to foster agricultural production and allow existing businesses to continue their operations.[237] Under state right-to-farm laws, qualifying producers are granted a defense under which they can continue with activities that may be a nuisance.[238] The integrators in the *Tyson Foods* lawsuit have raised this as an affirmative defense.[239]

The right-to-farm defense may not apply to nuisances involving the overapplication of manure due to statutory prerequisties. In many states, any nuisance that results from the negligent, improper, or illegal operation of any such facility or operation is not accorded the right-to-farm defense.[240] Overapplication is clearly improper, so a nuisance allegation concerning this

234. *See* Overgaard v. Rock County Bd. of Comm'rs, No. 02-601, 2002 U.S. Dist. LEXIS 25404, at *9 (D. Minn. Dec. 30, 2002) (finding ownership of animals causing a nuisance under an independent contractor arrangement was sufficient to preclude summary judgment to the integrator).

235. *City of Tulsa*, 258 F. Supp. 2d at 1297 (granting partial summary judgment to plaintiffs on the liability of poultry integrators in nuisance).

236. *See, e.g.*, Margaret R. Grossman & Thomas G. Fischer, *Protecting the Right to Farm: Statutory Limits on Nuisance Actions Against the Farmer*, 1983 WIS. L. REV. 95, 152 (1983) (observing that the laws protect farmland by limiting nuisance lawsuits but do not affect the application of environmental regulations); Neil D. Hamilton & David Bolte, *Nuisance Law and Livestock Production in the United States: A Fifty-State Analysis*, 10 J. AGRIC. TAX'N & LAW 99, 101 (1988) (noting interpretations of right-to-farm laws and summarizing developments); Jacqueline P. Hand, *Right-to-Farm Laws: Breaking New Ground in the Preservation of Farmland*, 45 U. PITT. L. REV. 289, 305-06 (1984) (observing that some right-to-farm statutes prioritize agricultural uses).

237. Terence J. Centner, *Creating an 'Undeveloped Lands Protection Act' for Farmlands, Forests, and Natural Areas*, 17 DUKE ENVTL. L. & POL'Y FORUM 1, 53-55 (2006) (listing the 50 statutes); s*ee, e.g.*, 740 ILL. COMP. STAT. ANN. § 70/1 (2008).

> It is the declared policy of the state to conserve and protect and encourage the development and improvement of its agricultural land for the production of food and other agricultural products. . . . It is the purpose of this Act to reduce the loss to the State of its agricultural resources by limiting the circumstances under which farming operations may be deemed to be a nuisance.

Id.

238. *See* Martha L. Noble & J.W. Looney, *The Emerging Legal Framework for Animal Agricultural Waste Management in Arkansas*, 47 ARK. L. REV. 159, 198 (1994) (acknowledging the strong defense provided by right-to-farm laws).

239. *Tyson Foods* Answer, *supra* note 125, at Tenth Affirmative Defense.

240. *E.g.*, GA. CODE ANN. § 41-1-7(c) (2009); *see* Pestey v. Cushman, 788 A.2d 496, 501 (Conn. 2001) (rejecting a right-to-farm defense for unreasonable or unlawful odors).

activity should not qualify.[241] Neither Oklahoma's nor Arkansas's right-to-farm laws contain such a prerequisite.[242] However, the Oklahoma statute says that agricultural activities must be "consistent with good agricultural practices."[243] The overapplication of manure fails to meet this prerequisite. Under the Arkansas statute, the right-to-farm defense is not available unless the agricultural operation employs "practices that are commonly or reasonably associated with agricultural production."[244] Producers over-applying manure to fields are not following a reasonable practice; they should not qualify for the Arkansas right-to-farm defense.

A second impediment to the right-to-farm defense in some states is the coming-to-the-nuisance prerequisite.[245] The right-to-farm defense is only available for nuisances that occur because of "changed conditions in the surrounding area occurring after the farm has been in operation for more than one year."[246] Thus, if a residential subdivision is built near a CAFO, the residents cannot complain of preexisting nuisance activities. The Arkansas right-to-farm statute incorporates this prerequisite.[247] If there are no changes surrounding a producer who is over-applying manure, the right-to-farm statutory defense does not apply, and neighbors could successfully maintain a nuisance lawsuit.[248]

CONCLUSION

The regulation of CAFOs under the Clean Water Act began more than thirty years ago when Congress defined these production facilities as point sources of pollution.[249] Until the late 1990s, few CAFOs were employing

241. *See, e.g.*, Margaret Rosso Grossman, *Biotechnology, Property Rights and the Environment*, 50 AM. J. COMP. L. 215, 233 (Supp. 2002) (noting that right-to-farm laws often protect farmers only if their practices are not negligent or improper); Randall Wayne Hanna, *Right to Farm Statutes–The Newest Tool in Agricultural Land Preservation*, 10 FLA. ST. U. L. REV. 415, 430-31 (1982) (concluding the most common type of right-to-farm law normally does not offer protection to the negligent conduct or improper operation of an agricultural activity).

242. ARK. CODE ANN. § 2-4-107 (2008); OKLA. STAT. tit. 50, § 1.1 (2008).

243. OKLA. STAT. tit. 50, § 1.1(B).

244. ARK. CODE ANN. § 2-4-107(c)(2)(B) (2008).

245. *See, e.g.*, Terence J. Centner, *Governments and Unconstitutional Takings: When Do Right-to-Farm Laws Go Too Far?*, 33 B.C. ENVTL. AFF. L. REV. 87, 95-98 (2006) (evaluating the coming-to-the-nuisance prerequisite).

246. 740 ILL. COMP. STAT. ANN. 70/3 (West 2008).

247. ARK. CODE ANN. § 2-4-107(a).

248. *See, e.g.*, Trickett v. Ochs, 838 A.2d 66, 73 (Vt. 2003) (acknowledging that most right-to-farm laws were to deal with conflicts when people move to traditionally rural areas); Herrin v. Opatut, 281 S.E.2d 575, 577–78 (Ga. 1981) (observing that the Georgia right-to-farm law addresses situations where there are changes in use of surrounding land).

249. *See* Effluent Limitations Guidelines, 39 Fed. Reg. 5704 (Feb. 14, 1974); Concentrated Animal Feeding Operations, 41 Fed. Reg. 11458 (Mar. 18, 1976); *see also*

nutrient management plans to limit applications of manure nutrients being applied to fields.[250] Due to legal challenges, the EPA adopted new CAFO regulations in 2003 and 2008 that enunciated more detailed requirements to reduce nutrient pollution.[251] Whereas thirty years ago it was common for animal producers to apply manure to fields without nutrient management plans and without government oversight, today such a practice is not acceptable. The overapplication of nutrients by CAFOs with NPDES permits is a violation of federal law.[252] The overapplication of manure by non-CAFOs is contrary to recognized agronomic practices, may be a violation of state law,[253] and may be a nuisance.

The basis for the CAFO regulations has been the social unacceptability of egregious water pollution. Although society had allowed animal producers to apply manure with a minimum of oversight, today this freedom has been curtailed because of the harm being caused. Through the Clean Water Act and its regulations, society has chosen to preclude food animal production practices accompanied by excessive nutrient contamination. Overall social utility favors the right to be free from harmful pollution over allowing animal producers to pollute water resources.

This distinction involves the reassignment of property rights. In the past, Americans accepted agronomic practices that allowed landowners to apply manure for crop production without restricting the amount of nutrients being applied to lands, even though these practices resulted in the pollution of federal waters. Today, the social value of food animal production versus the harm inflicted by pollution has changed. Society, through governmental pollution legislation, has decided that persons have the right to enjoy waters unimpaired by too many nutrients. As a society becomes more concerned about the harm imposed by pollution, it may decide that, for the collective good, polluters should bear the costs of their polluting activities. Changing values mean that harmful activities that were once condoned may become unacceptable.

While property rights advocates may argue that governmental interference in food animal production is taking away property rights,[254] what is really

Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486, 494 (2d Cir. 2005).

250. In documentation for the proposed revisions to the CAFO regulations in 2001, the EPA noted that only 2,530 CAFOs had applied for NPDES permits. Preamble to the 2001 Proposed CAFO Regulations, *supra* note 24, at 2963.

251. Preamble to the 2003 CAFO Regulations, *supra* note 24, at 7176-7274.

252. Overapplication of nutrients violates the nutrient management plan, which only allows the application of nutrients needed for crop production. 40 C.F.R. §§ 122.23(e), 122.42(e) (2009).

253. *See, e.g.*, ARK. CODE ANN. § 15-20-1106 (2008) (making it a violation of state law to apply designated nutrients to soils or crops within a nutrient surplus area unless application is done in compliance with a nutrient management plan).

254. By establishing permitting regulations for CAFOs, the government has reduced the rights of agricultural producers to freely engage in production activities. *See* Timilin Kate Sanders, Comment, *Making Landowners Whole Without Putting Holes in Zoning: Personal*

happening is that society is rebalancing the rights and interests of individual property owners for the collective good.[255] Private property rights normally change over time, as these rights are the product of democratic governance. Private property rights are created by democratic action to enhance social welfare.[256] Democratic action also protects neighbors from harm and unfair interferences, and reflects concern about the preservation of resources for future generations.[257] Landowners are stewards of real property, and private land ownership includes the public's interest in safeguarding public welfare and future land resources.[258] Given that the justification for private land ownership is overall social utility, if society places a higher value on pollution-free water, our laws can be amended through democratically elected officials to restrict former rights to pollute.

By delineating requirements on the application of manure by CAFOs, the government articulates values concerning the acceptability of agricultural activities. The definition of agricultural stormwater discharges means that the overapplication of manure accompanied by a discharge of pollutants into water by a CAFO owner or operator is illegal.[259] In setting this standard, the CAFO regulations suggest that the overapplication of manure by any person is an unreasonable and unacceptable practice. Although the regulations only apply to CAFOs, a practice that is unacceptable and illegal for large animal producers might also be unacceptable for smaller producers. Although persons injured by pollutants from animal production may not be able to garner relief under statutory proscriptions, they may gain relief through common law causes of action. If the overapplication of manure by an animal producer unreasonably interferes with water quality, it should qualify as a nuisance for which relief may be granted.

Waivers as the Solution to the Partial Regulatory Takings Compensation Issue, 15 GEO. MASON L. REV. 513, 520 (2008).

255. This has been expressed as honoring the rights of individual property owners or promoting practices that elevate society's collective good. *See* ERIC T. FREYFOGLE, ON PRIVATE PROPERTY: FINDING COMMON GROUND ON THE OWNERSHIP OF LAND 137 (2007).

256. *See id.* at 138.

257. *Id.*

258. *Id.* at 141.

259. 40 C.F.R. §§ 122.23(e), 122.42(e) (2009).