NO. 14–1248

UNITED STATES COURT OF APPEALS FOR THE TWELFTH CIRCUIT

UNITED STATES OF AMERICA,
Plaintiff-Appellant, and

DEEP QUOD RIVERWATCHER, INC., and DEAN JAMES,
Plaintiffs-Intervenors-Appellants

v.

MOON MOO FARM, INC.,
Defendant-Appellee.

ON APPEAL FROM

THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW UNION,

THE HONORABLE ROMULUS N. REMUS PRESIDING.

CASE NO. 155–CV–2014

BRIEF OF PLAINTIFFS-INTERVENORS-APPELLANTS

DEEP QUOD RIVERWATCHER, INC., AND DEAN JAMES

ORAL ARGUMENT REQUESTED

TEAM 50

ATTORNEYS FOR APPELLANTS

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JURISDICTION

Plaintiffs-Intervenors-Appellants Deep Quod Riverwatcher (Riverwatcher) and Dean James properly served upon all required parties letters of intent to file citizen suits under the Federal Water Pollution Control Act (Clean Water Act or CWA) of 1972 § 505, 33 U.S.C. § 1365 (2013) and the Resource Conservation and Recovery Act of 1976 § 7002, 42 U.S.C. § 6972 (2013). Before the expiration of the waiting period, Plaintiff-Appellant United States, on behalf of the United States Environmental Protection Agency (EPA), sued Defendant-Appellee Moon Moo Farm, claiming violations of effluent limitations and permitting requirements under the CWA. The CWA grants the district court original jurisdiction over civil actions filed by EPA and arising out violations of the Act. 33 U.S.C. § 1319(b) (2013). Riverwatcher moved to intervene as plaintiff-intervenors pursuant to 33 U.S.C. § 1365(b)(1)(B) and alleged additional causes of action under 42 U.S.C §§ 6972(a)(1)(A) and (B). Like the CWA, RCRA grants district courts original jurisdiction over citizen suits. 42 U.S.C. § 6972(a). Defendant-Appellee Moon Moo Farm then counterclaimed for trespass against Riverwatcher and James. Because Appellee's state law claim arose from the pollution events and subsequent nitrate advisory of April 2013, the district court had supplemental jurisdiction. 28 U.S.C. § 1367(a) (2013).

The district court's final order granted summary judgment for Appellee on all counts. Appellants Riverwatcher and Dean James each filed a timely notice of appeal. Fed. R. App. P. 4(a)(1)(B)(ii). This Court has appellate jurisdiction pursuant to 28 U.S.C. § 1291 (2013).

STATEMENT OF THE ISSUES

I. Is the Queechunk Canal, a bypass canal through which most of the flow of the Deep Quod River is diverted, a public trust navigable water of the State of New Union?

II. If the canal is not a public trust navigable water, can samples obtained in good faith by a private party while navigating the canal be used as evidence in a civil enforcement case?

III. Is a dairy farm with 350 head of cattle a concentrated animal feeding operation subject to permitting under the National Pollutant Discharge Elimination System if it discharges into the Queechunk Canal?

IV. If Appellee Moon Moo Farm is not a concentrated animal feeding operation, do the excess nutrient discharges from its manure application fields prevent it from taking advantage of the agricultural stormwater exemption, thereby subjecting it to National Pollutant Discharge Elimination System permitting liability?

V. Does a mixture of untreated liquid manure and acid whey from a yogurt manufacturing plant constitute a solid waste subject to regulation under Subtitle D of the Resource Conservation and Recovery Act?

VI. Does application of the mixture to silage fields during a wet weather event create an imminent and substantial endangerment to human health?

STATEMENT OF THE CASE

This case is about drinking water contamination in the city of Farmville, New Union. Riverwatcher initiated the suit in the spring of 2013 after months of complaints by Farmville citizens, which culminated in a nitrate advisory issued by the Farmville Water Authority, alerted Riverwatcher to agricultural runoff contaminating the Deep Quod River, a source of drinking water for the city.

After water samples taken from a ditch that drains into the Queechunk Canal tested positive for high levels of nitrates, fecal coliforms, and suspended solids, Riverwatcher and Dean James served notices of suit on Moon Moo Farm, the New Union Department of Environmental

Quality, and EPA. Before the expiration of the waiting period, EPA brought suit against Moon Moo Farm, alleging that discharges into the canal classified Moon Moo Farm as concentrated animal feeding operation (CAFO) and required it to obtain a National Pollutant Discharge Elimination System (NPDES) permit. EPA also alleged that the drainage ditch violated restrictions on effluents discharged from point sources. Riverwatcher and Dean intervened in the CWA action and also alleged violations of RCRA's open dumping and "imminent and substantial endangerment" provisions. Moon Moo Farm filed a counterclaim against Riverwatcher and James for trespass. After discovery, all parties moved for summary judgment.

The district court granted summary judgment to Appellee on all counts. Reasoning that there is no public right of navigation of a manmade body of water, the district court concluded that James obtained the evidence by trespass. Without this evidence, Appellee remained a "no-discharge" animal feeding operation (AFO) and was therefore not in violation of any permitting provisions under the Clean Water Act. The court also held that even if Moon Moo were considered a CAFO, its discharges would be exempt as agricultural stormwater runoff. Finally, the district court granted summary judgment to Moon Moo Farm on both RCRA claims. The court first concluded that the manure/whey mixture fell outside the scope of RCRA because it was not a "solid waste." It concluded secondly that the nitrate advisory did not pose an imminent and substantial endangerment to human health because infants who were likely to be sickened could drink bottled water. This Court ordered all parties to brief issues relating to the public trust doctrine, the CWA, and RCRA.

STATEMENT OF FACTS

Moon Moo Farm. Appellee Moon Moo Farm is a dairy farm with 350 head of cattle. R. at 4. The farm collects and pipes liquid cattle waste from its cow barn to outdoor storage lagoons. R.

at 4. The farm also accepts, free of charge, acid whey from the Chokos Greek Yogurt processing facility in Farmville, which it dumps into the manure lagoons. R. at 5. The farm then spray-applies the mixture to its 150 acres of silage. R. at 5. As required by federal and state law, Moon Moo Farm has filed a Nutrient Management Plan (NMP) with the New Union Department of Agriculture that contains manure application rates and expected rate of soil nutrient uptake. R. at 5. The department, however, does not usually review submitted NMPs. R. at 5. Moon Moo Farm does not have a NPDES permit. R. at 5.

The Queechunk Canal. In the 1940s, owners of the property now occupied by Moon Moo Farm dug the Queechunk Canal as a bypass through the Deep Quod River. R. at 5. At fifty yards wide, the canal is frequently used as a shortcut for navigating the Deep Quod River because most of the river's flow is diverted through the canal. R. at 5. The canal flows through Moon Moo Farm, which has posted "No Trespassing" signs on either side of the Canal. R. at 5. At least one of Moon Moo Farm's drainage ditches empties into the Queechunk Canal. R. at 6.

The Deep Quod River. The Deep Quod River, a drinking water source for the citizens of Farmville, runs year round and flows into the Mississippi River. R. at 5. In the late winter and early spring of 2013, citizens of Farmville complained that the Deep Quod River smelled like manure and was an "unusually turbid brown color." R. at 6. Around this time, the Farmville Water Authority issued a nitrate advisory for the Deep Quod River, urging families with infants to use bottled water. R. at 6.

Deep Quod Riverwatcher and Dean James. Deep Quod Riverwatcher (Riverwatcher) is a nonprofit organization incorporated in the State of New Union. R. at 6. Dean James is the organization's designated "riverwatcher," an elected position within the organization, and a citizen of New Union. R. at 6. After receiving complaints about the color and smell of the Deep

Quod River, James conducted an investigatory patrol in a small jon boat. R. at 6. As part of his patrol, James navigated up the Queechunk Canal and observed Moon Moo Farm's workers applying the manure mixture during a rainstorm. R. at 6. He then took samples of water flowing from the drainage ditch. R. at 6. The water tested positive for nitrates, fecal coliforms, and suspended solids. R. at 6.

James collected the samples during a period of heavy rainfall in Farmville: two inches in two days. R. at 6. Riverwatcher's environmental health expert, Dr. Susan Generis, stated that while she could not say with certainty that Moon Moo Farm was the "but for" cause of the April 2013 nitrate advisory, the farm's discharges did contribute to the advisory. R. at 7.

SUMMARY OF THE ARGUMENT

Appellants claim against Appellee Moon Moo Farm for public health and environmental liabilities associated with toxic and excessive agricultural runoff. Appellants assert that the district court erred in granting summary judgment to Appellee on all counts because there remain triable issues of fact with respect to the counts of trespass, CWA violations, and RCRA violations. Appellants respectfully request, therefore, that this Court reverse the district court's decision and remand for further proceedings.

The district court first granted summary judgment to Appellee for its trespass claim, holding that the Queechunk Canal is not a public trust navigable waterway because it is manmade. Appellants argue, however, that the Queechunk Canal is a public trust navigable waterway under the public trust doctrine. First, the land surrounding the canal was subject to the ebb-and-flow of the tide before the canal was built. Additionally, the canal is navigable-in-fact. Appellants alternatively contend that the evidence obtained by James, even if deemed a trespass, is still admissible. Most circuits have held that the exclusionary rule does not apply in civil cases or to

searches by private parties, even when those searches are performed illegally. Appellants argue that even if the exclusionary rule applies to this civil action, however, James' actions fall under a well-established good-faith exemption.

Secondly, because the samples collected by James were inadmissible, the district court ruled that Appellee could not be considered a CAFO and thus did not require a permit under the NPDES permitting program. Appellants respectfully submit that Appellee's operation falls squarely within the definition of a Medium CAFO. Appellee's drainage ditch constitutes a point source, and the Queechunk Canal is a water of the United States. Appellants argue in the alternative that the Queechunk Canal itself is a point source and the Deep Quod River is undisputedly a water of the United States. Finally, Appellants argue that landspreading areas of the farm itself may be properly deemed a "point source" under the CWA.

Third, the district court found that Appellee's discharges, even if it were a CAFO, fell under the agricultural stormwater exemption. Appellants argue that poor land management practices prevent Appellee from taking advantage of the agricultural stormwater exemption. Because the nitrate advisory was issued prior to the heavy rains of April 11 and 12, Appellants argue that the discharges merely coincided with, and were not caused by, wet weather events, thus falling outside of the stormwater exemption.

Fourth, the district court held that the mixture of liquid manure and acid whey did not constitute a solid waste subject to regulation under Subtitle D of RCRA. Appellants urge the court to recognize that, as a matter of law, solid waste determinations are fact-specific rather than categorical, and argue that Appellee treats both the manure and whey as discarded materials. The district court also found that the mixture would be exempt as an agricultural waste under 40 C.F.R. § 257(c)(1). Appellants argue that the exemption does not apply to Appellee because (1)

acid whey is not an agricultural waste, (2) the mixture is placed in lagoons before it is land applied, and (3) the mixture is applied in a manner inconsistent with the agricultural waste exemption.

Finally, the district court determined that the mixture did not constitute an imminent and substantial endangerment to human health subject to redress under RCRA § 7002(a)(1)(B). Appellants first note that the district court applied the wrong definition of "solid waste" for purposes of imminent and substantial endangerment claims. As a matter of law, moreover, a showing of probable future harm is all that is required for purposes of such suits; Appellee does not have to be the "but for" cause of the nitrate advisory for the provision to apply. In light of these errors, Appellants ask that this Court reverse the district court's grants of summary judgment and remand for further proceedings.

STANDARD OF REVIEW

A district court must grant summary judgment if the movant "shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The burden of proof rests on the moving party, and the court must draw all reasonable inferences in favor of the party opposing the motion. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986). This Court reviews the district court's grant of summary judgment de novo and applies the same standard as the district court. *Pennsylvania Coal Ass'n v. Babbitt*, 63 F.3d 231, 236 (3rd Cir. 1995).

ARGUMENT

I. Riverwatcher's site visit was not a trespass because the Queechunk Canal is a public trust navigable waterway.

Considering the facts at bar, the Queechunk Canal is a public trust navigable waterway of New Union because it is (1) subject to the ebb and flow of the tide and is (2) navigable in fact. The Supreme Court has repeatedly stated that public trust doctrines are a matter of state law. *See Appleby v. City of New York*, 271 U.S. 364, 395 (1926); *Idaho v. Coeur d'Alene Tribe of Idaho*, 521 U.S. 261, 285 (1997). The Court reaffirmed this most recently in *PPL Montana v. Montana* by ruling that the public trust doctrine remains a matter of state law. 132 S. Ct. 1215, 1235 (2012). When ruling on state law claims, federal courts must use the law of the state in which they sit. *Erie R.R. Co. v. Tompkins*, 304 U.S. 64, 78 (1938). Following this logic, there are 50 state public trust doctrines to public rights in waters to consider, not one federal doctrine. While the State of New Union's definition of "navigable waters" is unclear, even under the most stringent test for "navigable water" applicable to state public trust doctrines, James was not trespassing when he entered the Queechunk Canal in his jon boat.

A. The site visit was not a trespass because the land surrounding the canal was subject to the ebb and flow of the tide from the Deep Quod River.

Not all states use the same definition of "navigable waters" to determine where the public has a right to access and use waterways. For example, Maryland, Massachusetts, and New Jersey still use the ebb and flow test to determine their public doctrines. *See, e.g.*, *Hirsch v. Md. Dep't of Natural Res.*, 416 A.2d 10, 12 (Md. 1980); *Brosnan v. Gage*, 133 N.E. 622, 624 (Mass. 1921); *Borough of Neptune City v. Borough of Avon-By-The-Sea*, 294 A.2d 47, 52 n.2 (N.J. 1972). Under this test, navigable water is defined as "waters within the ebb and flow of the tide." *The Thomas Jefferson*, 23 U.S. 428, 429 (1825). Again, determination of public trusts navigable water remains a matter of *state* law. *PPL Montana*, 32 S. Ct. at 1235. The ebb and flow test thus remains a valid test for "navigable waters."

In the case at bar, the district court ignored that the land surrounding the canal has always been subject to the ebb and flow of the tide. Moon Moo Farm, along with its 150 acres of fields, is located at a bend in the course of the Deep Quod River. R. at 5. During the 1940s, the river bend flooded regularly enough to cause the previous owner to excavate a bypass canal in order to alleviate the flooding at the river bend. R. at 5. Plainly, the Deep Quod River experienced flooding as a result of the ebb-and-flow of the tide. The flooding necessitated the creation of a bypass canal, the Queechunk Canal. Without the bypass, the land surrounding the current canal would still be subject to the ebb and flow of the Deep Quod River. This land constituted waters within the ebb and flow of the tide and therefore "navigable waters." As navigable waters, the canal is subject to the public trust doctrine, and Moon Moo Farm cannot claim the canal as private property.

B. Even if the land was not subject to the ebb and flow of the tide, the canal was open for public use because it is navigable in fact.

States that do not use the ebb and flow test use some version of the "navigable in fact" test to determine navigable water. The strictest definition of "navigable waters" is grounded in federal Commerce Clause case law. Thus, satisfaction of the Commerce Clause's definition of "navigable waters" will satisfy any state definition. In an early but still important ruling, the Supreme Court held in that "waters are navigable in fact when they are used, or are susceptible of being used, in their *ordinary condition*, as highways for commerce." *The Daniel Ball*, 77 U.S. (10 Wall) 557, 563 (1870) (emphasis added). In 1940, the Supreme Court expanded its definition of navigable waters when it held that "navigable-in-fact" are those waters that are "used or are susceptible of being used" as highways for commerce and travel. *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 406 n.21 (1940). It is erroneous to determine navigability solely based on the natural condition of the waterway. *Id.* at 407. A waterway that is suitable for

navigation is not barred from a navigable-in-fact classification because of artificial improvements. *Id.* Thus, the fact that a waterway is made-man is not controlling.

Under this test, multiple state courts have found that manmade canals are navigable in fact and thus subject to the public trust doctrine. *See, e.g., Fish House, Inc. v. Clarke*, 693 S.E.2d 208 (N.C. Ct. App. 2010), cert. denied, *Fish House, Inc. v. Clarke*, 700 S.E.2d 750 (N.C. 2010); *McQueen v. S.C. Coastal Council*, 580 S.E.2d 116 (S.C. 2003); *Hughes v. Nelson*, 399 S.E.2d 24 (S.C. Ct. App. 1990). Moreover, the rule is the same in England—the original source of the United States' public trust doctrine. *See The Queen v. Betts*, (1850) 117 Eng. Rep. 1172, 16 Q.B. 1022 (holding that an artificial waterway cut to straighten a navigable river is a navigable water). In the recent *Fish House* case, the court found that the Old Sam Spencer Ditch constituted a navigable water even though it was man-made. 693 S.E.2d at 135. There, the general public used the Old Sam Spencer Ditch, a canal, for over twenty years, and long boats navigated the canal successfully. *Id*. On these facts, the Court determined that the Old Sam Spencer Ditch constituted navigable water because it was navigable in fact. The Court grounded its holding in the principle that "the controlling law of navigability concerning the body of water 'in its natural condition' reflects only upon the manner in which the water *flows* without diminution or obstruction." *Id.* (emphasis added).

The Queechunk Canal is equally a "navigable water" subject to the public trust doctrine. In the case at bar, the majority of the flow of the Deep Quod River diverts through the Queechunk Canal. Similar to the Old Sam Spencer Ditch, watercrafts navigate the Queechunk Canal with ease. R. at 5. Moreover, the waterway is commonly used as a shortcut up and down the Deep Quod River. R. at 5. As in *Fish House*, the totality of the facts alleged in this case show that the

Queechunk Canal satisfies the most stringent "navigability" test used by states—the "navigability in fact" test.

Finally, the district court should not have applied the holding from *Kaiser Aetna* for two reasons. In *Kaiser Aetna*, the Court analyzed navigability with respect to § 10 of the Rivers and Harbors Appropriation Act of 1899, a federal law. *Kaiser Aetna v. United States*, 444 U.S. 164, 164 (1979). When ruling on state law claims, federal courts must use the law of the state in which they sit. *Erie*, 304 U.S. at 78. Determinations of navigability for purposes of federal statutes do not control navigability determinations for purposes of state law trespass claims. (Appellants note that *Erie* was itself a state trespass claim.)

Secondly, the district court misinterpreted the purpose in *Kaiser Aetna* for holding that a man-made marina was not "navigable water" subject to public use. In *Kaiser Aetna*, the Supreme Court stated that the concept of "navigable waters of the United States" does not have a fixed meaning. 444 U.S. at 170. Instead the purpose for which the concept of "navigability" is invoked in a particular case must be determined. *Id.* at 171. While recognizing the legitimacy of past definitions of "navigability," the *Kaiser* Court defined "navigable waters" for the purpose of determining when the exercise of public right of navigation over *interstate* waters amounts to a government "taking" which requires government compensation. In its determination, the Court weighed such factors as economic impact of the regulation and its interference with invested backed expectations. *Id.* at 175. The Court ultimately held that the marina was not subject to public use because of the strong economic investment and expectations of the company that developed the marina. *Id.* at 179 (emphasis added). Here, the canal is not the subject of interstate commerce, and Moon Moo Farm has no economic investments or expectations, as it did not invest its own money in the canal's development. R. at 5. Furthermore, the implementation of

"No Trespassing" signs at both ends of the canal demonstrate that Moon Moo Farm did not derive for expect to derive economic benefits from use of the canal. R. at 5. While the canal is commonly used as a shortcut, there is no evidence that boaters pay Moon Moo Farm to use the canal, as doing so would potentially subject them to a trespass charge. Thus the holding in *Kaiser Aetna* does not apply in the instant case.

II. Even if the site visit constitutes a trespass, the evidence obtained is still admissible.

The exclusionary rule prevents either the federal or state government from using evidence gathered in violation of the United States Constitution. *See* U.S. Const. amend. IV. It is applicable to unreasonable searches and seizures by the government. *See Mapp v. Ohio*, 367 U.S. 64 (1961). But it is rarely extended outside of the criminal proceeding context. In the case at bar, the exclusionary rule does not apply because (1) the case is a civil action, (2) the evidence was not seized by a government official, and (3) the evidence was obtained under the good faith exception.

A. The exclusionary rule applies only in criminal cases, not civil cases.

The Fourth Amendment exclusionary rule for evidence illegally seized has "never been interpreted to proscribe the use of illegally seized evidence in all proceedings or against all persons." *United States v. Calandra*, 414 U.S. 338 (1974). Indeed, the Supreme Court has on more than one occasion refused to apply the exclusionary rule outside of the criminal context. For instance, it has declined to extend the exclusionary rule to civil tax proceedings. *United States v. Janis*, 428 U.S. 433 (1976). Following *Janis*, the Supreme Court next declined to extend the exclusionary rule to civil deportation proceedings. *INS v. Lopez-Mendoza*, 468 U.S. 1032 (1984). The Court has further declined to extend the exclusionary rule to parole hearings. *Pa. Bd. of Prob. & Parole v. Scott*, 524 U.S. 357 (1998). When the exclusionary rule is invoked outside

of the criminal proceeding context, the Court uses a balancing test to determine whether the rule applies. *See Calandra*, 414 U.S. 338 (balancing the deterrence effect of excluding the evidence against the societal cost of excluding it). The balancing test's primary purpose is to determine whether application of the exclusionary rule will deter "future unlawful police conduct." *Id.* at 347.

Since this is a not a criminal proceeding, the balancing test would be applicable only if a government actor seized the evidence. Riverwatcher is a nonprofit incorporated in the State of New Union. R. at 6. Since it is neither a state nor a federal actor, the balancing test is wholly inapplicable. There is no need to balance the deterrence effect of excluding the evidence against the societal cost of excluding it. The exclusionary rule is intended to deter unlawful police conduct, not the conduct of private parties.

B. The exclusionary rule does not apply to searches by private parties, even when such searches are performed illegally.

The Supreme Court has applied the exclusionary rule only to federal or state actors. Although the Fourth Amendment does not contain language mandating the exclusion from trial of evidence seized by government agents, the Supreme Court ruled in *Weeks v. United States* that evidence obtained by an unlawful search and seizure by Federal agents could not be admitted in a federal criminal trial. 232 U.S. 383 (1914). The Court expanded the application of the exclusionary rule to include state law enforcement officials as well. *See Mapp*, 367 U.S. 64. While the Court has expanded the exclusionary rule to include more government officials, private party searches have always remained immune from the exclusionary rule. *Burdeau v. McDowell*, 256 U.S. 465 (1921). Here, the Court reasoned that the drafters of the Constitution never intended to restrain the activities of individuals who are not employed by the government. *Id.* at 475.

In the case at bar, Dean James, a citizen of the State of New Union, is unequivocally a private party. R. at 6. The Deep Quod Riverwatcher, Inc. is a non-governmental organization, as are all Riverwatchers. *Id*. A non-governmental organization is "any scientific, professional, business, or public-interest organization that is neither affiliated with nor under the direction of a government [and is] also termed a *private voluntary organization*." Black's Law Dictionary (9th ed. 2009). Hence, the title "private party" applies to Dean James both in his individual capacity as well as in his official capacity as the Deep Quod Riverwatcher. No court would deny the admission of the evidence into a criminal proceeding, let alone a "nominally civil action." R. at 9. The evidence obtained by the Riverwatcher is admissible.

C. Even if the exclusionary rule applies, Dean James' actions constitute a good-faith exemption.

The district court misapplied the holdings in *Trinity Industries* and *Smith Steel*. *See Trinity Indus., Inc. v. OSHRC*, 16 F.3d 1455 (6th Cir. 1994) (holding that the exclusionary rule is applicable where the object of the proceeding is to punish the employer for past violations of OSHA regulations unless the good faith exception applies); *Smith Steel Casting Co. v. Brock*, 800 F.2d 1329 (5th Cir. 1986) (holding same). While the purpose of the instant case is to punish past violations, the good faith exception to the exclusionary rule clearly applies. Where the action was "pursued in complete good faith … the deterrence rationale loses much of its force." *United States v. Leon*, 468 U.S. 897, 919 (1984) (quoting Michigan v. Tucker, 417 U.S. 433, 447 (1974)). For purposes of the exclusionary rule, where the officer's conduct is *objectively* reasonable, the evidence is admitted. *Id.* at 920-21 (emphasis added).

James' investigation of the Queechunk Canal was objectively reasonable and was performed in good faith. In response to complaints about possible contamination of the community's drinking water, James made an investigatory patrol of the Deep Quod River as a whole. R. at 6.

His intent was to investigate the source of the water contamination, not to target Moon Moo Farm. While the Queechunk Canal may be private property, it is commonly used as a shortcut up and down the river despite the "No Trespassing" signs located at both ends. R. at 5. For the canal to be commonly used, the "No Trespassing" signs must be commonly ignored. If community members routinely ignore the signs while conducting business, it would objectively reasonable for someone navigating the Deep Quod River to believe it was permissible to enter the Queechunk Canal to investigate a potential public health crisis. Moreover, most of the flow of the Deep Quod River is diverted through the Queechunk Canal, which makes use of the canal a more efficient way to pilot a watercraft. James reasonably took advantage of a commonly used shortcut in order to investigate as much of the river as possible. Therefore, even if the exclusionary rule applies, the evidence should be admitted because it was discovered under good faith and objectively reasonable conditions.

III. Appellee falls squarely within the definition of a Medium CAFO, making it a "point source" under the CWA and thus subject to the NPDES permitting program.

The express purpose of the Clean Water Act (CWA) is the "restoration and maintenance of chemical, physical, and biological integrity of [the] Nation's waters" with a primary goal of eliminating pollutants into navigable waters. 33 U.S.C. § 1251 (2006). To this end Congress established the National Pollutant Discharge Elimination System (NPDES) in order to control water pollution by requiring permits for discharges of any pollutant into "navigable waters" from a "point source." Point sources are defined as "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch … [or] concentrated animal feeding operation … from which pollutants are or may be discharged." 33 U.S.C. § 1362(14) (2014). A violation of the CWA occurs when there is (1) a discharge of a pollutant (2) into the waters of the United States (3) from a point source (4) without a NPDES permit. *Parker v. Scrap Metal*

Processors, Inc., 386 F.3d 993, 1008 (11th Cir. 2004). Moon Moo Farm's operations meet all four criteria laid out in *Parker*. Appellee is in direct violation of the CWA and must submit to the NPDES permitting program.

Discharging CAFOs have a "duty to apply for a permit" under NPDES. *Nat'l Pork Producers Council v. U.S. E.P.A.*, 635 F.3d 738, 751 (5th Cir. 2011). Under 40 C.F.R. § 122.23(e), discharge resulting from the application of manure, litter, or process wastewater by the CAFO to land areas under its control is a discharge subject to NPDES permitting requirements. Although the EPA may not require a CAFO to apply for a NPDES permit before there is an actual discharge, the Fifth Circuit has held that "it would be counter to congressional intent for the court to hold that requiring a discharging CAFO to obtain a permit is an unreasonable construction of the Act." *Nat'l Pork Producers*, 635 F.3d at 751. CAFOs are subject to NPDES permits because they are "unquestionably 'the proximate source' of any discharge of pollutants from land application areas under their control to the surface waters. … but for the application of manure by the CAFO to the land, there could never be a discharge of pollutants from the land to the surface waters." *Waterkeeper Alliance, Inc. v. U.S. E.P.A.*, 399 F.3d 486, 510 (2nd Cir. 2005).

A. Defendant's drainage ditch, observed by Riverwatcher, satisfies the 40 C.F.R. § 122.23(b)(6)(ii)(A) requirement for a Medium CAFO, and is itself a point source.

Under 40 C.F.R. § 122.23(b)(6)(ii)(A), an AFO is considered a CAFO if it discharges pollutants through a "man-made ditch, flushing system, or other similar man-made device" into "waters of the United States." 40 C.F.R. § 122.23. Parties do not dispute that Appellee meets the criteria for a Medium AFO. The only question at bar, therefore, is whether Appellee satisfies the criteria of § 122.23(b)(6). The facts of this case are clear on this issue. Appellee discharges pollutants from its land application fields through a "manmade ditch." Riverwatcher observed

and photographed discolored brown water flowing from Appellee's fields through a "manmade" drainage ditch into the Queechunk Canal. R. at 6. Test results of the water flowing through the ditch showed highly elevated levels of nitrates and fecal coliforms. *Id.* Appellee disputes only the admission of the evidence of the drainage ditch, not that the ditch otherwise satisfies § 122.23(b)(6)(ii)(A). Even if the drainage ditch did not satisfy the requirement of this section, however, Appellee would still be subject to NPDES, as the ditch itself is a discernible, confined, and discrete conveyance through which pollutants are discharged, and thus satisfies the definition of a point source under 33 U.S.C. § 1362(14).

As defined by the Supreme Court, "waters of the United States" includes "only relatively permanent, standing or flowing bodies of waters." *Rapanos v. U.S.*, 547 U.S. 715, 732-733 (2006). The Queechunk Canal, excavated in the 1940s by a previous owner of the farm, serves as a bypass canal of the Deep Quod River. R. at 5. Most of the flow of the Deep Quod River is diverted into the canal, which is "commonly used as a shortcut." R. at 5. The Deep Quod River and, in turn, the Queechunk Canal, flows year round, making the canal a permanent, flowing body of water. R. at 5. It would be patently inconsistent for the Court to hold that the original bend in the Deep Quod River is a water of the United States, but the bypass canal through which most of its water passes, by virtue of its location on Appellee's property, is not.

Appellee is the "proximate source" of the discharges: but for its land applications of liquid manure from its 350 dairy cows, there would not be agricultural runoff discharges, like those observed by Riverwatcher, into the waters of the United States. Thus the facts of the case make it clear that not only does Appellee satisfy the criteria of a Medium CAFO under § 122.23(b)(6), it actively discharges pollutants into the waters of the United States, and thus it has a "duty to apply for a permit" under NPDES. *Nat'l Pork Producers*, 635 F.3d at 751.

B. Alternatively, Appellee requires a NPDES permit because the Queechunk Canal both satisfies the requirements for a Medium CAFO and may itself be termed a point source, and the Deep Quod River is undisputedly a water of the United States.

The Queechunk Canal was excavated in the 1940s by a previous owner of Moon Moo Farm. R. at 5. It is not a naturally occurring waterway. By all definitions it is a "man-made device" under 40 C.F.R. § 122.23(b)(6)(ii)(A). Discharges from the land application of liquid manure flow from the Queechunk Canal into the Deep Quod River, which all parties agree is a water of the United States and subject to CWA permitting jurisdiction. R. at 7. Complaints of a manure smell and an unusual brown color in the Deep Quod River began in the late winter of 2013 and culminated in a nitrate advisory warning. R. at 6. The runoff from the land application of liquid manure by Moon Moo Farm is a "proximate source" of the discharges into the Queechunk Canal, which then flow into the Deep Quod River. Thus, even if the evidence of the drainage ditch supplied by Riverwatcher is inadmissible, Appellee would still meet the Medium CAFO definition and thus must obtain a NPDES permit.

Moreover, in *United States v. Vierstra*, the District Court of Idaho held that a single waterway or channel that is "waters of the United States" under the CWA may also be described appropriately as a "point source:"

> It would appear that a ditch *or canal* that otherwise falls within the definition of 'waters of the United States,' may in certain circumstances and depending upon the discharge, also constitute a point source for a discharge into a 'different water of the United States.' There is nothing in *Rapanos* that would foreclose this result.

803 F.Supp.2d 1166, 1173-1174 (D. Idaho 2011) *aff'd*, 492 Fed.Appx. 738 (9th Cir. 2012) (emphasis added). In the case at bar, therefore, although the Queechunk Canal meets the definition of a "water of the United States," it is entirely appropriate, in the alternative, to define it as the "point source" through which Appellee discharges pollutants into the Deep Quod River, an undisputed "waters of the United States." Thus, Appellee must still obtain a NPDES permit

even if it does not meet the definition of a CAFO. Appellee cannot claim that the Queechunk Canal is private property for purposes of its trespass claim without also accepting responsibility for it as a point source.

C. Alternatively, even if Moon Moo Farm does not meet the definition of a CAFO, the farm itself may be properly deemed a "point source" under the CWA and thus subject to the NPDES permitting program.

The courts have interpreted the definition of "point source" broadly. As noted by the Tenth Circuit in *United States v. Earth Sciences, Inc.*,

> The touchstone of the regulatory scheme is that those needing to use the waters for waste distribution must seek and obtain a permit to discharge that waste…[t]he concept of a point source was designed to further this scheme by embracing the broadest possible definition of an identifiable conveyance from which pollutants might enter the waters of the United States.

599 F.2d 368, 373 (10th Cir. 1979). The court likewise noted that it would contravene the intent of the CWA as well as the structure of the statute to "exempt from regulation any activity that emits pollution from an identifiable point." *Id. See also, Dague v. City of Burlington*, 935 F.2d 1343, 1354 (2nd Cir. 1991) *rev'd on other grounds*, 505 U.S. 557 (1992) (ruling that the Burlington culvert was a point source under the CWA despite the fact that the culvert did not discharge directly into navigable waters). *See also Sierra Club v. Abston Const. Co., Inc.*, 620 F.2d 41, 45 (5th Cir. 1980) (holding that discharges into a navigable body of water through naturally occurring ditches resulting from gravity flow may be properly deemed a point source).

In *Concerned Area Residents for the Environment v. Southview Farm*, the Second Circuit held that liquid manure flowing from a field into a swale (which, like a drainage ditch, can be either natural or manmade and often helps manage water runoff) was "channeled or collected sufficiently to constitute a discharge by a point source." 34 F.3d 114, 119 (2nd Cir. 1994). Moreover, the court held that, alternatively, the manure spreading vehicles themselves could be

properly deemed point sources. Relying on the 33 U.S.C. § 1362(14) definition of "point source" to include a "container" or "rolling stock," the court ruled that the collection of liquid manure into tankers and its discharge on fields from which the manure directly flowed into navigable waters was a point source discharge. *Id.* This holding was applied by the Ninth Circuit in *Community Association for Restoration of the Environment v. Henry Bosma Dairy*, ruling that "defining a CAFO to include any manure spreading vehicles, as well as manure storing fields, and ditches used to store or transfer the waste serves the purpose of the CWA to control the disposal of pollutants in order to restore and maintain the waters of the United States." 305 F.3d 943, 955-956 (9th Cir. 2002). Although *Bosma* is distinguished from the case at bar in that Bosma's farm was already classified as a CAFO, the court's ruling extending the architectural footprint of the CAFO to include the manure storing fields and ditches applies.

In the case at bar, Appellee collects manure and liquid waste from the cow barn through a series of drains and pipes, which run to an outdoor lagoon where the manure is stored for use as fertilizer. R. 4-5. The liquid manure is periodically pumped from the lagoon into tank trailers, which are then hauled by tractor and spread on 150 acres of fields. R. at 4. It is the liquid manure from these applications that are discharged into the waters of the United States. Given the holdings in *Southview Farm* and *Henry Bosma Dairy*, and the purpose of the CWA, the tank trailers from which the liquid manure is spread onto the fields are appropriately deemed point sources in and of themselves. Thus even if Moon Moo Farm does not meet the definition of a CAFO, it is still subject to NPDES.

IV. Regardless of its status as a CAFO, Appellee still requires a NPDES permit because poor land management practices prevent it from taking advantage of the agricultural stormwater exception.

A. If Moon Moo Farm is a CAFO, its discharges are not exempt under 40 C.F.R. § 122.23(e) because its discharges merely coincided with, and were not caused by, rain events.

Under 40 C.F.R. § 122.23(e), all land application discharges from a CAFO are subject to NPDES requirements. The only exception is "where [the discharge] is an agricultural storm water discharge as provided in 33 U.S.C. § 1362(14)." However, as interpreted by the courts, this exemption applies only to stormwater runoff where the rain event is the primary cause of the discharge. "There can be no escape from liability for agricultural pollution simply because it occurs on rainy days." *Southview Farm*, 34 F.3d at 120. In determining whether a discharge is exempt from the NPDES permitting program, the crucial question is not whether a discharge occurred during rainfall, but rather whether the discharges were the result of the rainfall. *Id*. at 121. In other words, discharges that merely occur during rainfall but are not caused by rainfall do not fall under the agricultural stormwater exemption, and they thus require a NPDES permit.

The Second Circuit reaffirmed this holding in *Waterkeeper Alliance*, ruling that whether a discharge from an area is subject to NPDES turns on "the primary cause of the discharge." 399 F.3d 486, 508 (2nd Cir. 2005). Discharges that are caused primarily by a rain event do not require permits under NPDES "even when those discharges came from what would otherwise be point sources." *Id.* at 507. However, a discharge stemming primarily from land application practices, and specifically from over-saturation of fields, could not be properly classified as "stormwater." *Id.* at 508. Moreover, exempting a farm when the discharges stem primarily from management practices would be contrary to the intent of the CWA. *Id.* Congressional intent in enacting 33 U.S.C. § 1362(14) was "to remove agriculture-related discharges primarily caused by nature, while maintaining liability for other discharges." *Id.* at 508-509.

The record is clear in this case that the discharges from Moon Moo Farm are not the result of rainfall, but rather are caused primarily by Appellee's land application practices. Since 2012,

Moon Moo Farm has accepted acid whey produced by the Chokos plant, which it has added to the liquid manure mixture that is applied to its fields. R. at 5. A "no-discharge" AFO is one that does not normally have a direct discharge from its manure handling facilities to waters of the State in conditions "up to an including the 25-year storm event." R. at 5. While Appellee may have once conformed to this definition, it no longer does. Complaints about the color and odor of the Deep Quod River began in the late winter of 2013—*before* the rain event of April 2013. R. at 6. This suggests that not only did Appellee discharge pollutants into the waters of the United States before the rain event on April 11 and April 12, but that the two inches of rain that fell on those two days were not the primary cause of the pollutant discharges.

Both Dr. Ellen Mae and Dr. Emmet Green submitted affidavits stating that the addition of acid whey from the Chokos plant to the liquid manure lowered the pH of the soil. R. at 6-7. Because of the lowered pH of the mixture, the Bermuda grass crop was not able to effectively take up the nutrients in the manure, resulting in an over-saturation of Appellee's fields. R. at 6-7. As in *Southview Farm*, it was this over-saturation that was the primary cause of the pollutant discharge. Notably, the court in *Southview Farm* ruled that evidence of "sufficient quantities of manure" present in the run-off would indicate that the discharge was caused by land application practices rather than rain. 34 F.3d at 121. Given the complaints that the Deep Quod River "smelled of manure" and was "an unusually turbid brown color" beginning several months before the rain event in April 2013, as well the issuance of nitrate advisories by the Farmville Water Authority both before and after the rain event in April, it is clear that the pollutant discharges into the Deep Quod River stemmed primarily from Appellee's land management practices and cannot be shoehorned into the "stormwater" exemption. R. at 6-7.

The district court based its holdings on the CWA claims on the U.S. District Court for the Northern District of West Virginia's decision in *Alt v. U.S. E.P.A*. This ruling, however, ignored key factual differences between *Alt* and the case at bar. In *Alt*, the court found that the particles of manure and litter discharged into the Potomac River were merely the inevitable result of poultry litter use and storage and "would [have] remain[ed] in place and not become discharges of a pollutant unless and until stormwater conveyed the particles to navigable waters." 979 F.Supp.2d 701, 714 (N.D.W. Va. 2013). Appellee's discharges of liquid manure into the Queechunk Canal, as discussed above, are not merely incidental to its farming practices—i.e., pollutants that but for stormwater would have remained in place—they are the direct result of land management practices. Furthermore, whereas in *Alt* there would not have been complaints about discharges but for rain events, complaints about pollutant discharges in the Deep Quod River began before the April rain event occurred. These two key factual distinctions render the holding in *Alt* inapplicable to the case at bar.

B. Even if Appellee did not exceed the scope of its NMP, whether rain events caused or merely coincided with Appellee's discharges is a triable issue of fact.

As a "no-discharge" AFO, Appellee submits a nutrient management plan (NMP) to the Farmville Department of Agriculture detailing planned seasonal manure application rates, as well as expected uptake of nutrients by crops grown on the fields where manure is spread. R. at 5. According to its own records, Appellee has applied manure to its fields at rates consistent with its NMP. R. at 6. However, alleged compliance with an NMP cannot shield Appellee from the requirements of NPDES.

An operation with a site specific NMP that "ensure[s] appropriate agricultural utilization of the nutrients in the manure" need not obtain a NPDES permit, and any precipitation-related discharges are deemed "agricultural stormwater discharge." 40 C.F.R. § 122.23(e). However,

Appellee's NMP does not ensure appropriate agricultural utilization of the nutrients in its liquid manure. A no-discharge operation is generally exempt from NPDES because it does not have a direct discharge from its manure handling facilities to the waters of the state. While this may at one point have described Appellee's operations, the facts of the case show that it no longer does. Moon Moo Farm discharges pollutants from its land application of liquid manure directly into the Queechunk Canal and the Deep Quod River. R. at 6. It is no longer a "no-discharge" facility. The record clearly indicates that the discharges from Moon Moo's fields are caused primarily by an over-saturation of nutrients in its fields, and not by the rain event in April 2013. R. at 6. Thus the agricultural stormwater exemption still does not apply to Moon Moo Farm.

V. Appellee's mixture of liquid manure and acid whey is a solid waste subject to regulation under Subtitle D of the Resource Conservation and Recovery Act (RCRA).

Appellee's argument rests on the assertion that neither Congress nor the EPA ever envisioned regulating agricultural wastes as solid wastes under RCRA. The language of the statute, EPA's implementing regulations, and relevant case law, however, all establish that agricultural wastes are readily considered "discarded" under certain circumstances. Whether Appellee's mixture of liquid manure and acid whey constitutes a solid waste, therefore, is a triable issue of fact.

A. Solid waste determinations are fact-specific, rather than categorical, and Appellee plainly treats both the manure and whey as discarded materials.

Both the acid whey and liquid manure are "discarded materials" because their producers and handlers treat them as wastes rather than as commodities. For purposes of citizen suits under RCRA solid waste "means any garbage, refuse, sludge . . . and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial . . . and agricultural operations." Resource Conservation and Recovery Act (RCRA) § 1004, 42 U.S.C. § 6903(27). *See, e.g., Cordiano v. Metacon Gun Club, Inc.*, 575 F.3d 199, 205 (2d Cir. 2009). The

definition of solid waste "turns on the meaning of the phrase, 'other discarded material,' since this term encompasses all other examples provided in the definition." Final Rule: Identification of Non-Hazardous Secondary Materials That Are Solid Waste, 76 Fed. Reg. 15456, 15462 (2011).

Congress did not define the term "discard" for purposes of RCRA. Nonetheless, courts have deemed the following considerations relevant when determining whether a material is "discarded": "(1) whether the material is 'destined for beneficial reuse or recycling in a continuous process by the generating industry itself'… (2) whether the materials are being actively reused, or whether they merely have the *potential* of being reused … [and] (3) whether the materials are being reused by [their] original owner, as opposed to use by a salvager or reclaimer." *Safe Air for Everyone v. Meyer*, 373 F.3d 1035, 1042 (9th Cir. 2004), *citing Am. Min. Cong. v. U.S. E.P.A.* (AMC I), 824 F.2d 1177, 1185 (D.C. Cir. 1987) (emphasis in original). *See also American Min. Cong. v. U.S. E.P.A.* (AMC II), 907 F.2d 1179 (D.C. Cir. 1990); *United States v. ILCO, Inc.*, 996 F.2d 1126, 1131 (11th Cir. 1993). Courts also use the "identity test:" if market participants treat the materials as valuable commodities, and if the derivative products are "indistinguishable" from products made with analogous raw materials, the materials are not "discarded." *Safe Food & Fertilizer v. E.P.A.*, 350 F.3d 1263, 1269 (D.C. Cir. 2003), *on reh'g in part*, 365 F.3d 46 (D.C. Cir. 2004). Thus, a material's classification as solid waste turns on whether the producer intends to "legitimately" reuse the material or, in other words, whether it is "more commodity-like than waste-like." 76 Fed. Reg. 15456-01.

Under these criteria, Appellee's liquid manure and acid whey mixture are readily classified as "discarded." Excessive land application does not constitute "legitimate" reuse, nor does the market treat the materials as valuable. Liquid manure of dairy cattle, unlike poultry litter, cannot

be resold on the open market and is therefore not an agricultural commodity. *See Oklahoma v. Tyson Foods, Inc.*, No. 05-CV-0329-GKF-PJC, 2010 WL 653032, at *7 (N.D. Okla. Feb. 17, 2010) (finding that poultry litter is an agricultural commodity with both a market and market value). Untreated, the waste cannot be burned for fuel. *See* 76 Fed. Reg. 15456-01. Constructing an anaerobic digester can be prohibitively expensive. AgSTAR, *Funding On-Farm Anaerobic Digestion*, (Sept. 2012) http://www.epa.gov/agstar/documents/funding_digestion.pdf. The USDA has summarized the problem: "Land for manure application at agronomic rates is often not available without prohibitive transportation costs, and the tendency to dispose of the manure (as opposed to using its nutrients) increases." *Animal Manure Management: RCA Issue Brief #7*, (Dec. 1995), http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/?cid=nrcs143_014211#table2. Appellee has produced no evidence to show that liquid manure can be either used beneficially as a fertilizer or resold on the open market.

Appellee has also failed to demonstrate that it or Chokos treats the other component of the mixture, the acid whey, as a valuable product. Like liquid manure, acid whey is produced in large quantities: on average, every gallon of yogurt produced yields three additional gallons of acid whey. Justin Elliot, *Whey Too Much: Greek Yogurt's Dark Side*, Modern Farmer (May 22, 2013), http://modernfarmer.com/2013/05/whey-too-much-greek-yogurts-dark-side/. Although there is a contract between Moon Moo Farm and Chokos, moreover, Moon Moo Farm does not pay for the whey. R. at 4. As EPA has stated "The fact that there is a contractual relationship by itself is not dispositive that a material is not a waste, as there are contracts between parties to remove and dispose of wastes." *See* 76 Fed. Reg. 15456-01.

Finally, Appellee has failed to introduce evidence that it applies the mixture "in accord with farming practices that are beneficial in increasing crop yields." *Safe Air for Everyone*, 373 F.3d

at 1046. Appellee's own expert Dr. Emmet Green has stated only that Bermuda grass "tolerates" the higher pH of the whey mixture, not that it benefits the soil. R. at 6. Additionally, while Dr. Green has alleged generally that whey can be a soil conditioner, he failed to note that improper use of whey eliminates any benefits. USDA's Agricultural Research Service has cautioned that "[i]f applied in excess, whey can decrease soil productivity." Charles W. Robbins & Gary A. Lehrsch, Cheese Whey As A Soil Conditioner, in 6 *Handbook of Soil Conditioners* 167, 168 (Arthur Wallace & Richard Terry, eds., 1998). Appellee treats both the manure and whey as discarded materials, and they must therefore be regulated as such.

B. For purposes of the open dumping claim, the agricultural waste exemption is inapplicable because Chokos' acid whey is an industrial, not an agricultural, waste.

The district court found that Appellee did not violate RCRA's open dumping prohibition because the solid waste disposal criteria "do not apply to agricultural wastes, including manures and crop residues, returned to the soil as fertilizers or soil conditioners." 40 C.F.R. § 257.1(c)(1) (2014). The plain language of the regulation, however, exempts only "*agricultural* wastes returned to the soil as . . . soil conditioners." *Id*. (emphasis added). It does not exempt all products used as soil conditioners. In the case at bar, the acid whey is produced by an industrial process offsite. R. at 5. To classify these wastes as "agricultural" would be inconsistent with the plain language of the regulation.

Since neither RCRA nor its implementing regulations defines "agricultural waste," this Court must look to the meaning "most in accord with context and ordinary usage" and "most compatible with the surrounding body of law into which the provision must be integrated." *Green v. Bock Laundry Mach. Co.*, 490 U.S. 504, 528 (1989) (Scalia, J., concurring in the judgment). "Agriculture" is defined as "the science or practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other

products." Oxford American Dictionary (2d. ed. 1989). Listed as synonyms are "cultivation, tillage, tilling, husbandry, land/farm management, horticulture; agribusiness, agronomy." It would defy common sense to classify Chokos' activities as "agriculture." The exemption itself, moreover, specifies the types of wastes it covers: "manures and crop residues." 40 C.F.R. § 257.1(c)(1) (2014). Acid whey is neither: it is a byproduct of industrial food production. The plain language of the exemption in no way supports the inclusion of food manufacturing wastes like acid whey.

Even if the language of the statute is strained to accommodate acid whey as an agricultural waste, permitting land disposal of large amounts of industrial byproducts does not accord with RCRA's purpose. RCRA's primary purpose is "to promote the protection of health and the environment and to conserve valuable material and energy resources." 42 U.S.C. § 6902(a) (2013). *See also Meghrig v. KFC W., Inc.*, 516 U.S. 479, 483 (1996). If Congress intended to exempt food-processing wastes from RCRA's scope, it would have done so explicitly, as it did with manures and crop residues. RCRA's legislative history, too, shows that Congress was concerned about industrial wastes. The agricultural waste exemption originates from the House Report on RCRA, which EPA read to "explicitly indicat[e] that agricultural wastes returned to the soil are not to be subject to the Act." Final Rule: Criteria for Classification of Solid Waste Disposal Facilities and Practices, 44 Fed. Reg. 53440 (1979). The Report demonstrates that RCRA was intended to cover a broader scope of materials than what was traditionally considered "solid waste": "In addressing the problem, the Committee recognizes that Solid Waste, the traditional term for trash or refuse is inappropriate. The words 'solid waste' are laden with false connotations. They are more narrow [*sic*] in meaning than the Committee's concern. The words discarded materials more accurately reflect the Committee's interest." H.R. Rep. 94-1491, at 2,

(1976). The Committee envisioned that exemptions to RCRA's broad scope would be narrowly construed. *Id*. More importantly, however, the Committee expressly designed the legislation to include industrial and manufacturing wastes: "It is not only the waste by-products of the nation's manufacturing processes with which the committee is concerned; but also the products themselves once they have served their intended purposes . . . In summary, discarded materials are a direct result of national industrial production and the American life style." *Id*.

Appellee cannot use RCRA's agricultural waste exemption as cover to apply large quantities of food waste to its fields. To read otherwise would be to misconstrue the statute and disregard the purpose of RCRA.

C. EPA has stated that the agricultural waste exemption does not apply to liquid manure placed in lagoons.

EPA's final rule for open dumping criteria under RCRA qualified the agricultural exemption: "The criteria do not apply to agricultural wastes, including manures and crop residues, returned to the soil as fertilizers or soil conditioners. *All other disposal of agricultural wastes, including placement in a landfill or surface impoundment, is subject to these criteria*." 44 Fed. Reg. 53440 (emphasis added). "Surface impoundment" for purposes of EPA's solid waste disposal facility management criteria is a "human-made excavation … formed primarily with earthen materials … designed to hold an accumulation of liquid wastes." 40 C.F.R. § 257.2 (2014). "Lagoons" are listed as an example of a surface impoundment. *Id*. "Disposal," in turn, means the "discharge, deposit … or placing of any solid waste … into or on any land … so that such solid waste … or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters." *Id*.

Appellee collects and discharges manure and liquid waste into manure lagoons, constituting disposal. R. at 5. This method of storage increases the risk that the liquid manure or some

constituent thereof will be discharged into waters or emitted into the air. Although the lagoons are designed to contain all manure produced by the dairy operation without overflowing during a 25-year rainfall event, the regulation merely requires that the waste or any constituent thereof "may" be emitted into the environment. R. at 5. Appellee's use of manure does not fall under the agricultural waste exemption because it is placed in surface impoundments prior to application.

D. Appellee cannot take advantage of the agricultural waste exemption because the mixture is applied in quantities that prevent it from being "returned to the soil as fertilizers or soil conditioners."

Despite the language of the agricultural waste exemption, neither Congress nor EPA intended to create a blanket exemption for animal manure. EPA itself has stated that the States, not the Agency, properly determine whether manure is used beneficially as fertilizer in agricultural operations. Commercial and Industrial Solid Waste Incineration Units: Reconsideration and Final Amendments; Non-Hazardous Secondary Materials That Are Solid Waste, 78 Fed. Reg. 9112, 9171 (2013) (citing 76 Fed. Reg. 15456, 15480 (2011)). Similarly, courts have concluded that whether cattle manure is applied in such quantities as to eliminate its usefulness as fertilizer, thereby moving it beyond the bounds of the agricultural waste exemption, is a question of fact. *See Water Keeper Alliance, Inc. v. Smithfield Foods, Inc.*, 4:01-CV-27-H(3), 2001 WL 1715730 at *5 (E.D.N.C. Sept. 20, 2001). Courts have also held that over-application of manure was a plausible claim for relief under the tenants of RCRA. *Cmty. Ass'n for Restoration of the Env't, Inc. v. George & Margaret LLC*, 954 F.Supp.2d 1151, 1158 (E.D. Wash. 2013).

It is clear from the record that over-application of the liquid manure/acid whey mixture has rendered the soil unable to absorb beneficial nutrients. *See* r. at 6. Dr. Ella Mae stated that the mixture has both lowered the pH of the soil and prevented the Bermuda grass from taking up the nutrients in the manure. R. at 6. Appellee's expert, Dr. Emmet Green, did not dispute these facts.

R. at 6. A mixture that reduces soil's fecundity cannot properly be called a fertilizer. Dr. Green also did not provide evidence that the addition of acid whey at Appellee's farm was acting as a soil conditioner; instead, he merely alleged generally that whey is traditionally used as a soil conditioner. R. at 6. Although RCRA's implementing regulations exempt "agricultural waste … returned to the soil as fertilizers or soil conditioners," the manure/acid whey mixture neither fertilizes nor conditions. 40 C.F.R. § 257.2. Application of the mixture to the land, therefore, falls outside the scope of the agricultural waste exemption, and the mixture must be considered a solid waste.

VI. Appellee's use of manure and whey as spray fertilizer poses an imminent and substantial endangerment to human health subject to redress under RCRA § 7002(a)(1)(B).

The district court mistakenly relied on *Davies v. National Co-op Refinery Association* to conclude that Appellee's disposal of the manure/whey mixture, which resulted in contamination to Farmville's drinking water, did not constitute an "imminent and substantial danger" under RCRA because infants affected by the nitrate advisory could drink bottled water. R. at 11-12. RCRA § 7002(a)(1)(B) provides for a citizen action "against any person, … including any past or present generator … who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment." 42 U.S.C § 6972(a)(1)(B). The standard for "imminent and substantial danger" is liberal and requires only a showing of probable future harm.

A. The district court erred by applying the regulatory definition, rather than the statutory definition, of "solid waste."

For purposes of an "imminent and substantial endangerment" suit under RCRA, courts must use the statutory definition of solid waste. *Cordiano*, 575 F.3d at 206. The statute defines "solid waste" as "any garbage, refuse, sludge . . . and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial … and agricultural operations." 42 U.S.C. § 6903(27) (2013). The agricultural waste exemption, however, applies only to the open dumping regulations at 40 C.F.R. § 257.1(c)(1) and is unrelated to "imminent and substantial endangerment" claims.

The regulatory definition of "discard" is irrelevant for purposes of 42 U.S.C. § 6972(a)(1)(B) claims. The regulatory definition of "discard" refers only to wastes that have previously been classified as solid wastes under Subtitle D and must then be classified as hazardous or non-hazardous under Subtitle C. Thus, the district court erred when it determined that the mixture was not being discarded "within the meaning of … 40 C.F.R. § 261.2(a)(1)." R. at 11. The definitional regulation relates only to determinations of materials as hazardous or non-hazardous for purposes of Subtitle C and has no relevance to "imminent and substantial endangerment" claims for RCRA's citizen suit provision under Subtitle D. 40 C.F.R. § 261.1(b)(2); *see also Comite Pro Rescate De La Salud v. Puerto Rico Aqueduct & Sewer Auth.*, 888 F.2d 180, 186–187 (1st Cir. 1989).

As discussed above, the manure/whey mixture meets the statutory definition of a solid waste because it does not serve a beneficial agronomic function and is applied to the land primarily for disposal. *See infra* p. 25.

B. For purposes of an "imminent and substantial endangerment" suit under RCRA, plaintiffs need only show probable future harm.

In order to establish a prima facie case under the "imminent and substantial endangerment" provision of RCRA, plaintiffs must demonstrate: (1) the violator is a person (2) who has

contributed to the past or present handling, storage, or disposal of solid waste, and (3) the solid waste may present an imminent and substantial endangerment to human health and the environment. 42 U.S.C § 6972(a)(1)(B). Courts have interpreted this third element broadly: "This is 'expansive language', which is 'intended to confer upon the courts the authority to grant affirmative equitable relief to the extent necessary to eliminate *any risk* posed by toxic wastes." *Dague v. City of Burlington*, 935 F.2d 1343, 1355 (2nd Cir. 1991), *rev'd in part*, 505 U.S. 557 (1992) (citing *United States v. Price*, 688 F.2d 204, 213 (3rd Cir. 1982)) (emphasis in original). As the Supreme Court has stated, the threat must be present now, although the impact may not be felt until later. *Meghrig v. KFC W., Inc.*, 516 U.S. 479, 480 (1996). Finally, a threat is substantial as long as it is not "remote in time, speculative in nature, and *de minimis* in degree." *United States v. Reilly Tar & Chem. Corp.*, 546 F. Supp. 1100, 1109 (D. Minn. 1982). Under the standard articulated by the courts, Appellee's disposal of the liquid manure/hazardous waste mixture undoubtedly constitutes an "imminent and substantial endangerment" under RCRA.

While Dr. Generis could not say with certainty that Appellee's farm was the "but for" cause of the nitrate advisory, the nitrate advisory is merely one facet of the endangerment caused by Appellee. Analysis of the runoff samples from the drainage ditch leading to the Queechunk Canal showed highly elevated levels of nitrates and fecal coliforms. R. at 6. Appellee has, furthermore, explicitly conceded that the runoff from its fields contained nitrates, fecal coliforms, and suspended solids. R . at 7. These substances, which run into the Queechunk Canal and eventually into downstream parts of the Deep Quod River, pose a substantial endangerment to human health. As the district court stated, high levels of nitrates pose a serious risk to infants under two years of age, leading to "blue baby syndrome" and suffocation. Carrie Hribar, *Understanding Concentrated Animal Feeding Operations and Their Impact on Communities,*

National Association of Local Boards of Health 4 (2010), http://www.cdc.gov/nceh/ehs/docs/understanding_cafos_nalboh.pdf. High levels of nitrates may also be harmful to adults, as low blood oxygen can lead to birth defects and nitrosamine synthesis can lead to gastric cancers. *Id*. Nitrates, moreover, cannot be removed from water, and boiling water in an aluminum pan may concentrate the nitrates. *Nitrate: Health Effects in Drinking Water*, Natural Resources Cornell Cooperative Extension (2012), http://psep.cce.cornell.edu/facts-slides-self/facts/nit-heef-grw85.aspx. In addition to nitrates, fecal coliforms can sicken those who use polluted sources of drinking water. Hribar. at 9. Lastly, as the use of non-therapeutic antibiotics in CAFOs continues unabated, there is evidence that downstream consumers are exposed not only to pharmaceutical compounds but also to antibiotic-resistant bacteria. Hribar. at 10.

Appellee's land management practices demonstrate that the threat is ongoing. Appellee has argued that it should not be subject to NPDES permitting as a CAFO. Moreover, it has argued that application of the mixture during a wet weather event does not violate its NMP permit and is therefore permissible. R. at 6-7. Even if this Court upholds the determination that Appellee is not the "but for" cause of the April 2013 nitrate advisory, it cannot deny that Appellee will likely continue discharging a concentrated cocktail of pollutants into Farmville's drinking water.

Finally, the district court should not have relied on *Davies v. National Co-operative Refinery Association* for two reasons. First, the court's determination that high levels of nitrates did not constitute an imminent and substantial endangerment under RCRA was merely dicta, not part of the court's holding: "[we] need not determine whether plaintiffs' evidence would survive summary judgment on the question of 'imminent and substantial endangerment.'" *Davies v. Nat'l Co-op. Refinery Ass'n*, 963 F. Supp. 990, 999 (D. Kan. 1997). Secondly, in *Davies* the Kansas

Department of Health and the Environment was already engaged in remedial action at the site in question, and it could be shown that the contamination was confined to drinking water source used by a small, discrete group of adults at a property used for operating a radio station. *Id*. In the case at bar, Appellants claimed endangerment of a drinking water source used by an entire community, not simply a few adults at a remote location. Similarly, neither EPA nor the New Union Department of Environmental Quality has tested runoff from Appellee's farm, let alone begun remedial action. Appellee's contamination of the Deep Quod River and Farmville's drinking water thus falls within the liberal definition of "imminent and substantial endangerment" under RCRA.

CONCLUSION

In conclusion, Appellants ask that this Court overturn the district court's premature grants of summary judgment on all counts. Appellants claim: the Queechunk Canal is a public trust navigable waterway under the public trust doctrine; the exclusionary rule does not apply to the instant case; Appellee is a CAFO under the Clean Water Act and cannot take advantage of the stormwater exemption; the liquid manure and acid whey mixture Appellee applies to its Bermuda grass crop is a solid waste under RCRA; and Appellee's land management practices constitute an imminent and substantial endangerment to human health. Appellants ask this Court to recognize that there are still triable issues of fact and that Appellee is not entitled to judgment as a matter of law.