

D I A L O G U E

Fertilizer or Solid Waste: How Far Does RCRA Spread?

Summary

On January 14, 2015, the Eastern District of Washington held that Cow Palace Dairy, LLC, is liable under the Resource Conservation and Recovery Act (RCRA) for storing, applying, and managing manure in a way that poses a substantial and imminent endangerment to public health in violation of open dumping provisions. This opinion is significant because it defines Cow Palace's manure as solid waste under RCRA. The court focused on the manner in which Cow Palace stored and used the manure to determine that RCRA exemptions, such as the agricultural waste exemption for fertilizer, did not apply. Given the ruling's significance, the Environmental Law Institute (ELI) convened a seminar on this topic on February 26, 2015. The panelists held a dynamic discussion: What are the confines, or lack thereof, for the definition of solid waste under RCRA? Why can the same byproduct, in this case manure, be regulated waste in one case and unregulated fertilizer in a separate case? What does this case mean going forward for RCRA practitioners, the regulated industry, nonprofit advocacy, and government regulation? Below, we present a transcript of the event, which has been edited for style, clarity, and space considerations.

Bruce Myers (moderator) is a Senior Attorney at ELI.

Craig Johnston is Professor of Law and Director of Earthrise Law Center at Lewis & Clark Law School.

Jessica Culpepper is the Food Safety and Health Attorney with Public Justice.

Dale Mullen is a Partner with McGuireWoods LLP.

Bruce Myers: Welcome, everyone. We have three outstanding panelists who will discuss the Resource Conservation and Recovery Act (RCRA)¹ and the *Cow Palace*

case.² I'll introduce each of them in the order that they will speak to us today. Craig Johnston is a professor of law and clinical director of Earthrise Law Center at Lewis & Clark Law School, where he has been a faculty member since 1991. He was an assistant regional counsel with the U.S. Environmental Protection Agency (EPA), and also practiced with Perkins Coie. He teaches a variety of environmental law subjects, and has published extensively in the field of environmental law, including co-authorship of a casebook on hazardous waste law.

Jessica Culpepper is the Food Safety and Health Attorney with Public Justice, a public interest law firm, based in their D.C. headquarters. Jessica's environmental practice at Public Justice covers industrial animal agriculture, and she's long been engaged in sustainable and humane animal agriculture. Public Justice's food safety and health project is dedicated to bringing integrity to the food system and is primarily focused on reforming the industrial animal agriculture industry with environmental and common-law tort litigation. Previously, Jessica worked with the Humane Society of the United States.

Dale Mullen is a partner with McGuireWoods LLP, based in Richmond. Dale represents clients in complex litigation, on regulatory compliance issues, and with respect to legislative matters. He has broad experience in federal, state, and local government, and represents clients in agriculture and a variety of other industries, including utilities. Dale served in the U.S. Navy and has held appointments as Special Assistant U.S. Attorney, Assistant Attorney General for the Commonwealth of Virginia, and county attorney.

We're going to open with a round of initial remarks from each of our three panelists. Craig will lead off by providing background and broader context on RCRA. Jessica and Dale will then share what I suspect are very different perspectives on the *Cow Palace* case and what its implications might be, and they will talk a bit about the future of RCRA. After the presentations, we will have an opportunity for responses and comments from the panelists, and then we will invite questions from the audience.

1. 42 U.S.C. §§6901-6992k, ELR STAT. RCRA §§1001-11011.

2. *Community Ass'n for Restoration of Environment (CARE) v. Cow Palace, LLC*, No. 13-CV-3016, 45 ELR 20008 (E.D. Wash. Jan. 14, 2015) [hereinafter *Cow Palace*].

This Dialogue takes as a starting point the January 2015 ruling from the U.S. District Court for the Eastern District of Washington in *Community Association for Restoration of the Environment (CARE) v. Cow Palace, LLC*. In that case, District Judge Thomas Rice issued an order on cross-motions for summary judgment that is over 100 pages long. The order on cross-motions for summary judgment clears the way for trial on the remaining issues.³ In the judge's words, the case is about the defendants' manure management practices and their effect on public health and the environment.

With the environmental impacts of large-scale animal agriculture already receiving a great deal of public attention, it's no surprise that *Cow Palace* was immediate news. There was an article in Reuters that quoted one of our panelists, Jessica Culpepper, and noted that "a U.S. federal court has ruled for the first time that manure from livestock facilities can be regulated as solid waste, a decision hailed by environmentalists as opening the door to potential legal challenges against facilities across the country."⁴ The major question for us today is whether *Cow Palace* really does open that door. If so, how wide has that door been opened? And where do we go from here? What might this mean for RCRA more broadly, in contexts outside of dairies, or concentrated animal feedings operations (CAFOs), or even agriculture?

Craig Johnston: We're talking today about CAFOs, which are large-scale agricultural facilities. The problem with them from an environmental perspective is that they generate massive amounts of manure. In 2003, EPA estimated the total nationwide at 500 million tons of manure, and pointed out that that was more than three times as much as is generated in terms of biological waste by humans.⁵ The Washington federal district court found that the Cow Palace dairy CAFO itself generates more than 100 million gallons of manure annually. The issue is that unless it is properly handled, this manure can cause serious problems for both rivers and groundwater. In fact, the dead zones in the Gulf of Mexico are thought to be due in significant part to nitrates from Iowa and other midwestern agricultural states.

There's been a long regulatory history with CAFOs, most of it not very satisfying from a regulatory control perspective. EPA's efforts to regulate them under the Clean Water Act (CWA)⁶ have had only partial success, at best. There is an agricultural stormwater exemption. How that intersects with the fact that CAFOs are specifically listed as point sources has been a very controversial issue. In 2003,

EPA issued a rule requiring all CAFOs to obtain permits so long as they have the potential to discharge. That rule was rejected by the U.S. Court of Appeals for the Second Circuit.⁷ EPA later issued another rule requiring all CAFOs to obtain permits if they "propose" to discharge. That was rejected by the U.S. Court of Appeals for the Fifth Circuit in the *National Pork Producers Council* case.⁸

There is still some regulatory control under the CWA; I don't mean to suggest otherwise. But the vast majority of CAFOs don't have permits. There's an EPA Region 7 website that says that fewer than 5% of the CAFOs in either Iowa or Missouri have National Pollutant Discharge Elimination System (NPDES) permits at all under the CWA. At the same time, EPA has largely ignored these facilities under other statutes like RCRA and the Safe Drinking Water Act (SDWA).⁹ As a federal matter at least, many of these facilities have been essentially unregulated for the past several years. That's one reason why the *Cow Palace* case is so significant.

Interestingly, in this case, the environmentalists didn't even pursue claims under the CWA, at least as far as I can tell. Instead, they focused entirely on RCRA, bringing two claims: first, open dumping claims under §7002(a)(1)(A),¹⁰ arguing that there was a violation of §4005; and secondly, imminent and substantial endangerment (ISE) claims under §7002(a)(1)(B).¹¹ I should point out these were not hazardous waste cases; they were solid waste cases. When most people think of RCRA, they think of Subtitle C, which is the statute's hazardous waste component. Neither the open dumping prohibition in §4005 nor the ISE claims that are available to citizens under §7002(a)(1)(B) rely in any way on or require that there be handling of a regulatory hazardous waste.

The most important issue in this case by far relates to the question of whether the mismanagement of manure can constitute the discard of solid waste within the meaning of the relevant provisions. There are really two provisions. I want to emphasize we're not talking about RCRA Subtitle C. EPA has a very complex definition of what is a solid waste in its hazardous waste regulations.¹² That definition simply has no application with regard to either open dumping or with regard to the ISE claim. Instead, we're dealing with the statutory definition in §1004, Subsection 27. In that definition, the focus is on whether the material is discarded. The definition specifically includes discarded material from agricultural operations within the scope of the statutory definition.

However, the legislative history indicates that EPA has a regulatory exemption in its Subtitle B regulations for agricultural waste, including manures when they are returned to the soil as fertilizers or soil conditioners. That's

3. Subsequent to the ELI Seminar, this litigation was resolved via settlement by the parties. See *infra* note 34.

4. Ayesha Rascoe, *Farms Can Be Held Liable for Pollution From Manure*: U.S. Court, REUTERS (Jan. 16, 2015), at <http://www.reuters.com/article/2015/01/17/us-usa-pollution-manure-idUSKBN0KQ00F20150117>.

5. U.S. EPA, National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs); Final Rule. 68 Fed. Reg. 7176 (Feb. 12, 2003).

6. 33 U.S.C. §§1251-1387, ELR STAT. FWPCA §§101-607.

7. *Waterkeeper Alliance v. EPA*, 399 F.3d 486, 35 ELR 20040 (2d Cir. 2005).

8. *National Pork Producers Council v. U.S. Env'tl. Prot. Agency (EPA)*, 635 F.3d 738, 41 ELR 20115 (5th Cir. 2011).

9. 42 U.S.C. §§300f to 300j-26, ELR STAT. SDWA §§1401-1465.

10. RCRA §7002(a)(1)(A), 42 U.S.C. §6972(a)(1)(A).

11. RCRA §7002(a)(1)(B), 42 U.S.C. §6972(a)(1)(B).

12. See U.S. EPA, Definition of Solid Waste, 40 C.F.R. §261.2 (2014).

really the crux of the issue that the court was dealing with in *Cow Palace*.

There were other issues in the case. There is an interesting discussion of whether the plaintiff had standing to bring the lawsuit, and another interesting discussion about whether corporate liability extended beyond the primary company, the Cow Palace dairy, that was doing its operations on the site. I will not get into those other issues unless there are questions later on, but I do want people to know that there is some other significant law in this opinion.

In the open dumping context, at the summary judgment stage, there were two key questions: (1) whether there was undisputed evidence that the manure had contaminated the groundwater beyond the solid waste boundary; and (2) whether there was undisputed evidence that the manure had contaminated surface water beyond the solid waste boundary. The Eastern District of Washington found that there was undisputed evidence as to the first issue (that the manure had contaminated the groundwater), but not as to the latter question on surface water contamination. In the groundwater context, the definition of contamination under EPA regulations is triggered if there's an exceedance of what's called a maximum concentration limit (MCL) under the SDWA.

Here, the MCL was set at 10 milligrams per liter (mg/L). In this case, many of the groundwater wells in developing areas showed exceedance. One of the wells was as high as 234 mg/L. The court also found that wells downgradient from the dairy and, thus, beyond the boundary of the unit, were contaminated with nitrates. (By the way, there is one interesting tiny aspect of the court's opinion factually, and that is that the court's language was a bit loose with regard to whether or not it was proven that the nitrate exceedances were actually from this particular event. It's a relatively narrow factual issue, but it was one thing in the opinion that made me scratch my head a bit.)

With regard to the endangerment claim beyond the threshold solid waste question, there were two other significant issues: First, whether the plaintiffs established that the groundwater contamination met the ISE threshold of imminent substantial endangerment. I should point out that courts have long emphasized the significance of the word "may" in that statutory framework. Second, in this case, the court found that EPA had set the MCL under the SDWA at 10 mg/L because there were serious risks present above that level, including cancer risk. And here, 66 of the 115 residences within a mile had well water exceeding the MCL, with some exceeding 50 mg/L—five times the regulatory standard. Moreover, the court found that some of the nearby employee residences had nitrate levels of as high as 72 mg/L.

The other significant question was whether the plaintiffs had established that the relevant defendants had contributed or were contributing to the potential endangerment. The defendants tried to cast some blame on the nearby septic systems, but the court did not credit that discussion very seriously. There were millions of gallons of manure

leaking from the lagoons every year that couldn't possibly be absorbed by the plant life on the farm, at the dairy. And secondly, the court pointed out that the statute does not demand that the defendants be the sole cause of the release or of the contamination; instead, the statute only requires that a defendant be contributing to the disposal that may present endangerment.

Getting back to the key issue of whether there was discard of solid waste, the court reiterated what it had earlier found at the motion-to-dismiss stage, and that is that the overapplication or other mismanagement of manure can constitute the discard of solid waste, thus triggering §7002(a)(1)(B) and its potential endangerment provision, and also the open dumping provision enforceable under §7002.

I should point out that the ISE claim, the endangerment claim, is purely a remedial claim: There is no claim for penalties, no right to penalties, and it's really all about cleaning up the problem or requiring remedying of actions that may contribute to the endangerment. By contrast, in the open dumping context, there are penalties available through the citizen suit mechanism. So, one of the claims in *Cow Palace* is kind of a regulatory claim, the open dumping claim; and the other is a purely remedial claim.

The court went on to find "discard" in all three of the significant contexts in the case. First, with regard to land application, the court found that excessive overapplication that was untethered to the facility's nutrient management plan (NMP) did constitute the discard of waste. The court pointed out that the facility didn't use the nutrient analyses or consider the average crop yields. When the facility was applying the manure, it didn't account for the residual manure that was already in the soil. The court noted that on one occasion the dairy applied more than 7.5 million gallons of manure to a field that was already sufficiently fertilized. And the court noted that there were several other instances like that. The court also found that samples from below the root zones showed very high levels of nitrates.

In the lagoon context, the court also found that there had been direct discard because there was no real evidence that the lagoons were constructed in accordance with the standards set by the Natural Resources Conservation Service (NRCS).¹³ But the court also said that, even if the lagoons were constructed in accordance with those standards, the standards allow for permeability. The standards recommend liners, but they don't require liners. In this case, there was no real evidence of any liners. Regardless of whether there were liners or not, the court said that the facility's own employees testified that the lagoons frequently dry and crack, and there were other signs of lack of integrity such as vegetation growing within the lagoons. The plaintiffs had estimated that there had been millions of gallons of leakage. The court found that while the magnitude of the leak remained a disputed issue, the existence of

13. See NRCS, Conservation Practice Standard for Waste Treatment Lagoons, Code 359 http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_026002.pdf.

leakage was not. The court further found that this leaking was not a natural or expected consequence of the manure's use or intended use.

Finally, with regard to composting, the court found that the facility applied both solid and liquid manure in a composting area at the dairy. The court said the core sample showed that nitrates and other pollutants were migrating. It said: "The manure in the unlined composting area is both knowingly abandoned and accumulating in dangerous quantities and, thus, a solid waste."¹⁴

Taking a step back, I want to point out that this case fits within a larger RCRA construct where the case law has been mostly established with regard to imminent hazard cases or endangerment cases under §7002(a)(1)(B). There are three foundational cases under RCRA at the appellate level. One significant case under the CWA I would like to touch on briefly. The Second Circuit's decision in *Connecticut Coastal Fishermen's Association v. Remington Arms* is probably the most foundational case.¹⁵ In that case, the court was dealing with a lead shot facility. The court concluded that where the lead had been abandoned in Long Island Sound and was just left there, that material could be deemed to have been discarded for purposes of §7002(a)(1)(B).

The other two foundational RCRA cases are from the U.S. Court of Appeals for the Ninth Circuit, and both held that RCRA did not apply: the *Safe Air for Everyone v. Meyer* case,¹⁶ and the *Ecological Rights Foundation* case.¹⁷ As we'll probably talk about more extensively in the discussion later, the Eastern District of Washington in *Cow Palace* distinguished both Ninth Circuit precedents and found that actually the *Ecological Rights Foundation* case supported a finding that there has been a discard in the *Cow Palace* case.

Another case I want to mention is the *National Cotton Council* decision from the U.S. Court of Appeals for the Sixth Circuit.¹⁸ This involved a national challenge to EPA's pesticide rule under the CWA. The reason why it's relevant here is that essentially the court was dealing with the very same issue. The question was whether when you overapply pesticides and some of them wind up on the bottom of the river as opposed to being absorbed by plants or insects or whatever, whether that is a disposal of chemical waste within the meaning of the CWA. The Sixth Circuit panel unanimously concluded that it was. That was a national challenge; a petition for certiorari to the Supreme Court was filed and was denied. So, in that context, a regulatory context where penalties are also available, the Sixth Circuit ruled that if you overapply materials and they wind up posing an environmental problem, then that can be deemed

to be the disposal of a waste under the CWA. That's a very analogous situation to what we're dealing with here.

Jessica Culpepper: Let me provide a little background and summarize what I want to talk about. I think what's really important here when we're considering *Cow Palace* and the significance of the precedent it creates is to put it in a broader context. A lot of the arguments the defendants raised against the plaintiffs focused on: "Oh, it was fertilizer and [the U.S.] Congress never intended for the industry to be regulated like this." I feel strongly that that's just not true. It's far past time for this industry to come in line with other industries that need to meet standards under RCRA.

We need to think about RCRA as being very protective of public health and the environment; as being kind of a catchall statute to ensure that when there has been an endangerment that slipped through the cracks, RCRA is designed to catch that. I would also point out that this was a citizen suit. And when do citizen suits get filed? They get filed when the government is not regulating in a way that the citizens feel is adequate. In this case, there were two layers of government that were not regulating properly. There was a state agency that was going in and inspecting and giving the A-OK, but then in deposition was saying: "We told them these things but now that I'm reviewing the files the plaintiffs are giving to me, it seems that it's not okay at all."

Also there was the federal agency. EPA came in and did a massive two-year study (I'll talk about that more in a second) and came up with an Administrative Order on Consent (AOC), but it turned into a settlement process. A lot of the provisions were watered down in a way that the plaintiffs felt were not going to be protective of the environment. So, the use of RCRA here was as that catchall. There's an endangerment slipping through the cracks.

Let me tell you a little about who brought this case. The plaintiffs included a local group, the Community Association for Restoration of the Environment, which we lovingly call CARE. It's composed of area residents who organized the group more than 15 years ago when pollution first started in their community, a community where there used to be diverse agriculture: orchards, vegetable farms, and a small amount of animals. The residents appreciated and enjoyed that agricultural environment. But gradually, agriculture in the region was taken over by mega-dairies like the Cow Palace, and residents started noticing environmental problems.

The plaintiffs also included another group, a national organization that I'm sure most of you have heard of, the Center for Food Safety. I think that the identity of the plaintiffs is a powerful statement: One group consists of the local impacted residents, but another plaintiff entity is a national group making clear that this problem exists nationwide. The case was supported by a number of really fantastic experts, notably Dr. Robert Lawrence at the Center for a Livable Future, who did the work for us of

14. *Cow Palace*, slip op. at 95.

15. *Connecticut Coastal Fishermen's Ass'n v. Remington Arms Co., Inc.*, 989 F.2d 1305, 23 ELR 20699 (2d Cir. 1993).

16. *Safe Air for Everyone v. Meyer*, 373 F.3d 1035 (9th Cir. 2004).

17. *Ecol. Rights Found. v. Pac. Gas & Elec. Co.*, 713 F.3d 502, 43 ELR 20079 (9th Cir. 2013).

18. *National Cotton Council v. U.S. Environmental Protection Agency*, Nos. 06-4630 et al., 29 ELR 20006 (6th Cir. Jan. 9, 2009).

establishing the harm that comes from this type of pollution and why it's so critical that RCRA be used as a tool in this context.

The order in the case was against Cow Palace, but the litigation was originally brought against five dairies in five separate lawsuits. One of them settled out because of bankruptcy. Another two were consolidated because they're owned by the same business and shared a similar waste management system. So, the litigation went from five dairies and five separate lawsuits to four dairies and three separate lawsuits. It's also important to note here, in terms of thinking about this as a local issue or a national issue, that the dairy trade groups contributed to the defendants' litigation costs. That shows a concern in the industry that the status quo be preserved, which in turn speaks to the significance of the court's opinion.

As I mentioned, EPA did a two-year study of contamination in the Yakima Valley.¹⁹ Present in the area were lagoons, composite manure piles, application fields, and also supply wells, upgradient wells, and downgradient wells. What EPA did was look at what was going on, and comparing that to upgradient wells, downgradient wells, and the groundwater on the site. EPA tested for nitrates and a few other things, and concluded that the dairies were most likely the predominant cause of the nitrate contamination in the region.

So, here you have an industry, five mega-dairies that are producing tens of millions of gallons of waste per year and they need to deal with it. Maybe some of it can be used on crops. But what's happening to the rest? It's a huge byproduct and it's contaminating the local environment. Thus far, the industry has had kind of a free pass on their record. They've not had to operate in a way that prevents an endangerment or open dumping practices that are prohibited by RCRA, and we're seeing the impacts of that lack of compliance.

Let's talk about the dangers of the contamination that EPA found, as a way of thinking about the significance of the judicial opinion. I wouldn't call it a massive expansion of the statute; I would just call it a proper expansion under the statute. But when you're thinking about this precedent, you do need to consider it in terms of the impact to the common community.

Craig talked about some of the exceedances of MCL for drinking water. What EPA is saying in finding exceedances is that, look, if it's above that level in your drinking water, you are in danger. There's a danger to your health. As Craig said, the MCL was exceeded sometimes by six or seven times as much contaminant as acceptable. That's really scary. If the level is 10 mg/L, then if you're getting 70 mg/L; that's incredibly dangerous. Residential or community drinking water filtration systems such as reverse osmosis don't even work when nitrates are that high.²⁰

Also looked at were tracer chemicals to show that contamination was actually coming from the dairy and needed to be considered in terms of the dangers of exposure. Veterinary pharmaceuticals, hormones, steroids—these don't have drinking water standards. But we found the same pharmaceuticals, the same antibiotics that Cow Palace is purchasing and using on its herd, being found in its manure and then being found downstream in the plaintiffs' well water. Any other industry would be held responsible for similar contamination. So, really this case is about bringing this particular industry into compliance, bringing this one facility that was mismanaging its manure into compliance. They've got to be held responsible. Here's a slide of an infant suffering from blue baby syndrome.²¹ Not a pleasant picture. It shows that nitrate health effects are real and they're very serious and they're not to be ignored.

Let's focus on the ISE claim. RCRA is very protective of public and environmental health. Section 7002 contains some keywords.²² "Contributed," any person who has contributed to that cause. Plaintiffs don't have to prove "cause"; plaintiffs only have to prove that the defendants added to the contamination. Any contamination "past or present," has a kind of classic RCRA cradle-to-grave definition: "handling, storage, treatment, transportation . . . of any solid waste . . . which may present an imminent and substantial endangerment." Not "does" present, but "may" present.

A key ruling in the case concerned the plaintiffs' standing to bring the lawsuit. The defendants argued that there was no standing unless somebody had gotten sick. But that's not what RCRA says. That's not what Congress intended. And for goodness sake, that's not, I think, the right thing to do. The defendants suggest, and here I'm reading from the document, "that this court wait to act until a young infant in the area is first diagnosed." RCRA is here to prevent that imminent and substantial endangerment from happening to begin with. The fact that the defendants' wells showed contaminant levels far above EPA's established MCLs should be enough.

Let's discuss solid waste. Craig did a great job talking about the RCRA provisions for solid waste. I just want to key in again that the statutory definition is any "discarded material." So, if the material is discarded, it counts. Then, the statute provides a list of different places it could come from, and Congress specifically included "agricultural operations." So, Congress contemplated that discarded material created and disposed of at agricultural operations falls under the definition of solid waste and should be regulated under RCRA.

Let's take a look at RCRA's provision on disposal.²³ Again, I think Craig did a great job of covering this; I'm

19. U.S. EPA, Relation Between Nitrate in Water Wells and Potential Sources in the Lower Yakima Valley, Washington, http://www.epa.gov/region10/pdf/sites/yakimagw/nitrate_in_water_wells_study_march2013.pdf.

20. Nitrate removal when using reverse osmosis membranes is about 80%. See Water Treatment Guide, *Reverse Osmosis Removal & Rejection Rate Informa-*

tion, http://www.watertreatmentguide.com/rejection_&_removal.htm.

21. The panelists' PowerPoint presentations can be found at ELI, Fertilizer or Solid Waste: How Far Does RCRA Spread? (ELI Professional Practice Seminar), <http://www.eli.org/events/fertilizer-or-solid-waste-how-far-does-rcra-spread-eli-professional-practice-seminar>.

22. RCRA §7002, 42 U.S.C. §6972.

23. RCRA §1004(3), 42 U.S.C. §6903(3).

just going to hit on a couple of key points relevant to the case. Disposal includes “dumping, . . . leaking, or placing of solid waste.” Dumping, leaking, or placing. The provision covers a lot of other things too, but those are what I think are key to *Cow Palace*. The provision concerns not only the waste, but “any constituent thereof.” I think it’s obvious that it includes the nitrates in this case. We could be talking about other things, but really this case is about the nitrates. Nitrates are clearly a constituent of manure. And then the provision goes on to say: “may enter into the environment and [be] emitted into the air or discharged in the waters.” And then a key phrase for this case: “including ground waters.”

Putting all that together: Congress intended that RCRA cover discarded materials produced through agricultural operations and any constituent of that discarded material if it’s discharged in a number of ways, specifically including groundwater; and that contamination obviously needs to go beyond the solid waste boundary. I want to make a point here that the statute doesn’t say the property boundary; it says the solid waste boundary. That means the disposal area. That includes the employees’ houses with contaminated water. They may be on Cow Palace’s property, but they are beyond the solid waste boundary and therefore still covered by RCRA.

Given all the statutory provisions I’ve just mentioned, why did this industry believe it was exempt from compliance with RCRA? The answer is what Craig talked about: the agricultural waste exemption in the regulations.²⁴ Section 261.4(b)(2) in Title 40 of the *Code of Federal Regulations* is a pretty long section, but specific to our concerns here; it covers solid waste generated by the raising of animals, the growing and harvesting of agricultural crops, both of which are taking place at Cow Palace, to return to the soils as fertilizers. I think Cow Palace’s stance was that if they put it on the crops, it was intended as a fertilizer.

But what I think the court said, and this is vital, is that the issue isn’t about a facility asserting that they’re intending it to be used as a fertilizer; that they’re following some theoretical summary data in their NMP. Instead, the court said that the issue is about what is actually going on at the farm. What is actually being put on their crops, what’s actually going into their soils. It doesn’t matter if they’re getting a good crop; you need to look at the yearly crop yield, what is being harvested. What are the nutrients actually in the soil? Is the facility putting too much on? Are they putting on more than what a good crop yield requires? Are they putting on more than what the soil is already containing? In other words, that manure must be used as a fertilizer; otherwise, it’s a solid waste.

Here’s a slide of the composting and silage piles (see Figure 1). That gives you a sense of the size of these facilities and the amount of manure that’s being produced. It’s just enormous. And this doesn’t include the liquid manure, only the solid manure produced at one of these facilities. So, if you’re thinking about whether or not the manure is

being used as fertilizer, given that the facility is 500 to 700 acres, there’s just no way that the liquid and solid manure is going to be used to treat all those crops. There’s just no way.

Figure 1. Unlined Manure Piles (Foreground) and Silage Piles



Cow Palace says that its NMP indicates that often a crop requires 420 tons per acre of nitrate. Well, that’s not the case if a facility already has a lot of nitrate in its soil. That’s not the case if it isn’t yielding the maximum amount, which is what the estimates provide in the NMP. If a facility isn’t yielding that, then they shouldn’t be putting it down on their crop. You can’t rely on estimates. You have to look at what’s really going on.

In Washington State—actually, quite commonly around the nation—their NMPs call for putting the manure in basically a hole dug in the ground, on the premise that the manure put in there creates a seal that is going to somehow stop the contaminants from going through. The problem is that frequently the lagoons and basins that are constructed will crack. They erode. Fissures develop. There are a number of problems that very commonly come up with the regular use of a lagoon constructed in these ways.

Craig mentioned the Cow Palace lagoon being constructed to certain standards and how the judge said that didn’t matter. That’s exactly right. It doesn’t matter if a facility is constructing a lagoon on NRCS standards. Those standards are not legally binding. They don’t create a federal or state ceiling or floor. All that matters is whether the constituents of your solid waste are entering the ground and contaminating the groundwater past the dump boundary.

So, the defendants can assert all they want that their lagoons are up to standards. But even if they are up to the NRCS standards, that’s not enough if a facility is still creating an endangerment and if it’s still extending constituents of its solid waste past the bounds in a way that endangers people. In open dumping, that means going above the MCL for any given constituent. For nitrates, that’s 10 mg/L.

The next factual issue is whether this massive quantity of manure is being used as fertilizer. The answer is no. There’s

24. 40 C.F.R. §261.4(b)(2).

just no way. Here is a quote from District Judge Rice about just one of their fields:

Plaintiffs cite to several instances in which the Dairy applied considerably more nitrogen than the crop could possibl[y] use; for example, in 2012, although soil from the top two feet of the soil column showed nitrate levels in excess of what the alfalfa crop could use, the Dairy proceeded to apply 7,680,000 gallons of manure onto the already fertilized field . . . similar examples . . . which resulted *in tens of millions of gallons* of manure applied to fields requiring no fertilization.²⁵

Rather than taking the prior year's alfalfa crop, rather than looking at what's in the soil column and deducting that and applying what's needed, they were taking really optimistic estimates out of their NMP and saying, "Oh, but we applied less than what was needed." Well, if their fields are already saturated with nitrates, then anything put in will go straight below the soil. It's not going to be picked up by the crops. It's going to hit that groundwater and it's going to create a problem. It's not an issue of *when*. It's an issue of whether or not it's going to happen. That is the RCRA standard. Plaintiffs don't need to prove that this is happening in such-and-such amount of time. They only need to show this is going to happen. You know that these pollutants are entering the groundwater, and that they're going to continue entering the groundwater. There's nowhere else for them to go.

What we asked for is a commonsense determination that the facility operates under the same standards that any other industry would have to operate under. We wanted that declaration of liability because there were so many issues about manure. We asked them to line their lagoons and basins. Line them. We're not saying that they need to meet NRCS standards because NRCS standards still allow for a lot of leakage. The facility is directly over a drinking water aquifer. So, they aren't allowed to leak. The facility has to line them. The aquifer must be protected.

We asked for bottled water for local residents in a wider area than what is being covered by the EPA AOC, and we're saying that a better crop analysis is necessary. They need to do better soil sampling. They need to monitor the groundwater in a way that's more meaningful than what's happening under the AOC. We need an independent study, not the dairy monitoring itself or being allowed to choose somebody to do it for them even if they're saying that it's an expert. We want to agree on an independent study and a remediation plan to really clean this area up and to let the community have their clean water.

A lot of people on the defense side are saying, "Look, there's an AOC; the EPA has already dealt with this." But remember that the consent order was eroded through settlement. Evidence of that is the fact that the most recent EPA report after the Agency received the data from the cluster dairies (meaning the Cow Palace along with the other dairies in this lawsuit), found that they're still over-

applying the manure in several of their fields based on a one- to three-foot soil test result of nitrate.

Even now, even complying with the AOC, the dairies are still overapplying. That tells me the AOC is not enough. This citizen suit was necessary to protect public health. The lawsuit is going to do what is not being done. That's the reason why the legal tool of citizen suits is so important, and it's why this industry must operate in compliance with basic environmental standards.

Dale Mullen: I came to this Dialogue with three points to make. But before I start with the three points, I think it's important to establish the things upon which Jessica and I agree. First, I have been actively involved with the farm industry since I was a child. I participate in it every day and so perhaps my sensibilities are a little different than those who haven't been as fortunate. But one thing upon which I think we can all agree is that in lagoon management, nutrient management, and in truth in any manufacturing or industrial process, the management of residuals is important. On that we can all agree. It's simply safe for the environment. I can tell you that, having been around agriculture my entire life, I know that nobody cares more about the environment than farmers do.

I didn't bring you pictures of starving children in other countries.²⁶ Photos like that, I strongly suspect, are not taken near any of the farms in Washington State. In the United States, we produce food that's available, we produce food that's safe, we produce food that's reliable based on the contribution of the American farmer. That's a point that can't be lost here because while the plaintiffs certainly have a story to tell, there are defendants in the litigation too. But we all agree that residual management, lagoon management, and nutrient management should be done in a way that's safe. It should be done in a way that's in accordance with law. And it should be done in a way that the business community and the farmers who form the backbone of their communities can rely on. That brings me to my three points.

The first of my points is this: One thing that does not become clear in reading the judge's ruling, but will only become clear by reading the pleadings, is that Cow Palace and the related farms were compliant under federal standards. They were compliant under state standards. And they have been under a federal consent order for the last two years. Everyone thought, including EPA and the state of Washington, that this particular farm was compliant. That's point one. Point two is this: Agricultural wastes that are returned to the soil as fertilizer or as conditioners are not considered discarded materials in this sense. They're just not. Congress, the states, and EPA are clear on this point.

While some on the environmental advocacy side may see RCRA as a catchall designed to take care of those instances not addressed by the CWA specifically, I think

25. *Cow Palace*, slip op. at 18.

26. This reference is to a slide appearing earlier in the presentation by Ms. Culpepper. See *supra* note 21.

it's important to recognize that RCRA applies only to substances that are discarded, not to portions of useful materials that escaped to the environment. That has been the case in just about every other district court ruling that one could locate on the topic. Unlike the broad-ranging environmental statutes like the CWA, which applies to any addition of any pollutant to the nation's waters, RCRA applies only to solid or hazardous waste. A substance is only a solid waste if it's garbage, if it's refuse, or if it's otherwise discarded material.²⁷

Under *Safe Air for Everyone v. Meyer*,²⁸ the Ninth Circuit case that Craig talked about in the beginning, it's clear that a substance under RCRA is only discarded if it's disposed of, thrown away, or abandoned. In that sense, this particular case is not so much about manure as it is about nitrogen. So, my three points are that: (1) Cow Palace and the related farms were compliant; (2) Congress, the states, and EPA are clear that agricultural wastes are not considered discarded material when they're returned to the soil as fertilizer; and (3) there are significant unintended consequences if ultimately this district court ruling (which I think can be easily distinguished from other cases) is allowed to stand. There are significant unintended consequences that have to be considered.

The judge's order in *Cow Palace* at page 88 concludes that the application of Cow Palace's nutrient, the application of its fertilizer was "untethered"—and that term was used at least twice—"untethered to the dairy nutrient management plan and made without regard to fertilization needs of their crops."²⁹ I have to admit that when I first read that I thought, wow, that really is a problem. If in fact the application is untethered to any NMP and if the application is untethered to any fertilization needs of crops, then that certainly poses a significant problem not just under RCRA, but also under state law standards.

However, one of the facts—and this is important because, remember, this is an order that was based on summary judgment, meaning that there's no genuine issue of material fact and the court found that the plaintiffs were entitled to a judgment as a matter of law. Had the case gone to trial, evidence would have been adduced that Cow Palace had an approved and updated dairy NMP issued by the state of Washington in consultation with the SYCD, the South Yakima Conservation District; and that the dairy

NMP provided application rates that are based on a budget for nitrogen.

Additionally, had the case progressed to trial, had summary judgment not been awarded, evidence would have been adduced that there was a significant dispute of material fact because Cow Palace was routinely inspected by the Washington State Department of Agriculture (WSDA) and the WSDA found them to be fully compliant. I hate to disagree with Craig this early in my presentation, but Craig started out earlier with the idea that this particular industry, animal agriculture, is unregulated. That's simply not true.

Animal agriculture, especially the CAFOs, is regulated more highly than almost any other industry for which I currently do business. They are highly regulated. In fact, the state does inspections. EPA does inspections. They are regularly studied, and they are regularly asked to do things to bring them into or to keep them in compliance with law.

Washington State, in fact, found that Cow Palace was a very well-run facility. No mention of that is made in the court's order. I suggest that that might potentially be seen by some as a material fact important to the decision of this case. But Cow Palace was said by the state to also make very good use of nitrates. Now citizen suit plaintiffs certainly, as Jessica points out, can disagree with that. However, I do think it at least poses a genuine issue of material fact.

Had the case progressed to trial, I believe, based on what I've read, that the evidence would indicate that although Cow Palace did not mathematically subtract residual nitrate from the amount of manure applied, they did calculate the amount of manure to apply based on crop uptake estimates in the NMP. And I think that Jessica would agree with that. They used estimates, and that's really the best you can do in farming. Farmers are optimistic. Even the act of farming takes a certain amount of optimism, but Cow Palace did base their applications on estimates in their NMP. Those nitrogen content numbers then were set against expected crop yields. That's all you can do; use your expected crop yield. Then Cow Palace—and this is not a fact that would become clear from reading the ruling—applied less than their calculated amount. So, I'm not certain that the facts of trial would have showed that the application by Cow Palace was untethered to the dairy NMP or made without regard to the fertilization needs of their crops.

Cow Palace successfully grew crops each year using this method. There were no violations that were ever noted by the WSDA. No one at the WSDA told Cow Palace to use any different method for field application. In fact, inspectors noted an excellent use of nutrients by Cow Palace. Put yourself in the position of the farmer. You have a dairy NMP. You're acting in accordance with that dairy NMP. You're using organic fertilizer. You have to use nitrogen; that's simply a fact of life. You have to use nitrogen to grow crops. You've made the decision to use what you have available to you in organic form. You use it in the way that the state requires. The state notes that you're making an excel-

27. See, e.g., *Center for Comm. Action v. BNSF Railway Co.*, 764 F.3d 1019, 1030, 44 ELR 20191 (9th Cir. 2014) (rejecting argument that particulate matter emitted in diesel exhaust is "solid waste" that is "disposed" of); *Ecological Rights Found. v. Pacific Gas & Elec. Co.*, 713 F.3d 502, 516, 43 ELR 20079 (9th Cir. 2013) (rejecting argument that a chemical preservative dripping or leaching from utility poles is "solid waste"); *Safe Air for Everyone v. Meyer*, 373 F.3d 1035, 1047 (9th Cir. 2004) (airborne particulate matter from burning grass residue as a field treatment is not a "solid waste"); and *No Spray Coal, Inc. v. City of New York*, 252 F.3d 148, 150, 31 ELR 20707 (2d Cir. 2001) (rejecting argument that spraying pesticide along city streets misused the chemical and was "tantamount to a disposal" that rendered it a "solid waste"). Perhaps, the most famous case on point is *Oklahoma v. Tyson Foods*, 2010 WL 653032 at **10-11 (N.D. Okla. 2010), in which the court held that land-applied poultry manure is not "solid waste."

28. *Safe Air*, 373 F.3d at 1047 (airborne particulate matter from burning grass residue as a field treatment is not a "solid waste").

29. *Cow Palace*, slip op. at 88; see also slip op. at 91.

lent use of your nutrients in accordance with your dairy NMP. But suddenly you're found to have an application untethered to that plan—a finding that I think, respectfully, is out of the ordinary.

It's also important to note that after March 2013, Cow Palace was operating under an AOC with EPA. Cow Palace hired a professional agronomist, adopted a detailed field management plan with the irrigation water management plan approved by EPA, strict requirements for field applications.

Under the consent order, they also, beginning in 2013-2014, had all applications made specifically acting on the recommendations of the agronomist, calculated by the amount of manure based on nutrient samples from the lagoons, residual nitrates in the field as determined by that season's soil samples, and then the specific crop to be grown and several other factors. Now, again, you have to use projected crop numbers because you just don't know what the weather and Mother Nature are going to do to you in your ability to grow a crop. They had applied the consent order method and achieved the goal of no more than 45 parts per million at a two-foot level in five of the seven fields by the end of 2014.

A quick fact here: Nutrients at a two-foot level are not available for cropping. It's difficult for me to think of a crop that one could grow in Washington State that would achieve use of plant-available nitrogen at a two-foot level. So, I have some question about soil samples that go down that far. I think there would have been undisputed testimony at trial, but Cow Palace would continue to follow the terms of that consent order. So, the idea that some were left with, that Cow Palace was in some way a bad or irresponsible actor, I think is not borne out by the facts as they would have been adduced in trial. And frankly, I think they probably will be brought out because there will be additional hearings in the case.

The court's order at pages 93-95 also said that the liquid manure stored in the NRCS-compliant lagoons constitutes a solid waste because the lagoons are designed to leak and thereby discard manure into the environment. In fact, Cow Palace's dairy NMP says that all of the lagoons meet NRCS specifications and standards. Rule 313, as it's called, provides that manure storage has to be designed and constructed to achieve a national standard.³⁰ This is not just Washington State's standard. This is the standard for lagoons across the United States.

Cow Palace proved that one of its lagoons was built to NRCS standards. There was undisputed testimony and evidence that would have been offered that each of the lagoons was designed and built to NRCS standards, although the court did say that there was scant evidence (I think that was the quote) to support compliance. Primarily, this was because the structures were older. EPA's AOC required that all of the lagoons meet the Rule 313 standards for lagoons.

Currently, the consent order requires that they be lined at a rate of one per year. It's possible to line lagoons. It is expensive. It's not as easy as one might think, but it is possible and Cow Palace is moving toward that at the rate of one per year. I think there are four lagoons. The experts testified that the lagoons were not shown to be leaking in substantial amounts.

Unfortunately, we do not live in a perfect world. Many of these lagoons were built to the standards that were in existence at the time. Certainly, at the time that they were built, they were compliant. I don't believe, unless you have a composite lining in a lagoon, that you're going to find one that is 100% guaranteed to never leak. However, that has never been shown to be discard under RCRA. There was a formula that was used, even by the plaintiffs' experts. This really goes in part to Craig's point early in his presentation when he observed that the court had a fairly truncated discussion of the evidence linking elevated nitrogen. Craig's words were: "to this event" or to Cow Palace farms.³¹ I think that's a huge point. There was a formula that was given to demonstrate that manure leaked no matter what the permeability. The court relied on this methodology, but did not see any need to actually determine how much manure leaked. But the magnitude does matter.

A couple of other facts. Composting manure on native unlined soil is not commonly done. However, it was permitted by Cow Palace's dairy NMP. The Washington State inspectors never told Cow Palace not to do it. They never recommended that Cow Palace do it any other way. Instead, they commented on a well-run facility. Cow Palace compost is certified by the U.S. Department of Agriculture, and it's sold to third parties as a valuable commercial product. It is not, in fact, waste. It is a substantial part of their economic plan, and many farms have found that it's a great way to augment profit. It has value.

So, I want to start with the point that Cow Palace and the related farms were compliant under federal and state standards to tell you some things that you might not have known about their farm operations, to tell you about the federal AOC that's been in place since March 2014. Second, I want to talk about the idea that Congress, the states, and EPA are very clear on the point that agricultural waste returned to the soil as fertilizer or conditioners is not considered discarded material in the sense of this legislation. That was the intention from the earliest time in the 94th Congress when this particular portion of RCRA was adopted. Congress specifically exempted agricultural waste, fertilizer returned to the soil as conditioner. There was never a requirement that 100% of the fertilizer that was applied had to be used as plant-available. In fact, that's simply not possible. It really reveals a fundamental misun-

30. NRCS, Conservation Practice Standard, Waste Storage Facility: Code 313, available at http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_026465.pdf.

31. See *supra*, 45 ELR at 10635:

By the way, there is one interesting tiny aspect of the court's opinion factually, and that is that the court's language was a bit loose with regard to whether or not it was proven that the nitrate exceedances were actually from this particular event. It's a relatively narrow factual issue, but it was one thing in the opinion that made me scratch my head a bit.

derstanding of the way crops are grown to believe that one can predict with 100% accuracy the rate at which one's field will be able to utilize the nutrient that is provided.

You'll see fertilizer applied to bare ground, which sounds like a dreadful practice until you consider the fact that you have to apply fertilizer in some form to bare ground prior to planting if you expect your seed to emerge. Your crop needs to have that nitrogen available to it at the time that it's prepared to use it. The only way to do that is to apply before you plant, and then also to apply during the growth cycle of the plant for optimum growth. Agricultural waste that's returned to the ground as fertilizer is exempted by federal regulation. It was intended to be that way by Congress. The Ninth Circuit and other courts have consistently rejected any attempt to impose RCRA-based liability on those materials, and this is true even though some of those residual constituents enter the environment.

I rely on some of the same cases that Craig relied on from the beginning. There's really a mixed bag of decisions, but one thing is consistent: This is the first time that RCRA has ever been used as a mechanism to enforce against an otherwise compliant farm for application of fertilizer or soil conditioner. It's been considered and rejected in the context of preservative dripping or leaching from utility poles' creosote. That was rejected by the Ninth Circuit in the *Safe Air v. Meyer* case, which I think is highly instructive. Airborne particulate matter from burning grass residue has been deemed not to be solid waste.

There's another case out of the Second Circuit.³² But most importantly, and one that I don't think Craig mentioned, is *Oklahoma v. Tyson Foods*.³³ In this 2010 case, the Northern District of Oklahoma was specifically addressing these very same issues, but rejecting the logic used by the Eastern District of Washington in *Cow Palace*. Land-applied poultry manure is simply not solid waste. So, it is fair to say that there's a split between the district courts.

Bruce Myers: Thanks again to all of our panelists for their remarks. We're going to have a few minutes now of opportunity for each of our panelists to respond to what they've heard so far before we go to the open Q&A. I'm going to start with Craig. Professor Johnston, if you have anything to comment on at this point, feel free.

Craig Johnston: Just a couple of quick points. First, I want to clarify that when I was talking about unregulated, I was talking about most CAFOs. And secondly, I was talking about unregulated as a matter of federal law. Obviously, the state has the ability to regulate these facilities and they do. The question to my mind is whether either the CWA or RCRA is applied in an ongoing regulatory way to these facilities. The answer, in the vast majority of cases, is no.

In this particular case, there is a consent order under the SDWA, but that's only written in situations where there has been a violation of an MCL. Again, the vast majority of dairies and other CAFOs are not generally regulated under the SDWA in terms of the practices they have to comply with as a matter of course.

I also want to respond to Dale's point about whether these are bad or irresponsible actors. In both the open dumping context, and even more pointedly in the ISE context, we're really not focusing on fault. The open dumping provision is a strict liability provision. And certainly in the ISE context, the idea is that both regulators and citizens should have the ability to address endangerments regardless of whether there has been a violation of law or any kind of fault or negligence. So, that brings me to the leaking discussion that Dale offered about the impoundments. He admitted basically that it's impossible for most of these impoundments or lagoons to contain all these materials. I assume that, because they're being lined at a rate of one per year, there are still some lagoons in this particular case that are unlined.

Two points: First, if stuff escapes from the impoundments, that triggers discard. The courts have long been clear about that in both contexts. Second, even in hazardous waste context, if you spill a brand-new material, if it's a substance that would be hazardous waste when discarded, EPA says that if you don't clean it up immediately, it becomes waste and must be addressed under Subtitle C. I will also point out that we're not talking about necessarily any amount of leakage giving rise to claims under either one of the authorities that were invoked in this case. In the open dumping context, you do need to show the exceedance of MCL beyond the unit boundary. In the endangerment context, you do need to show that the situation may present an imminent and substantial endangerment. So, we're not setting up a circumstance where any overapplication or any leakage from the impoundments by definition can be something with respect to which a facility can be called into the court and found liable.

Finally, I'm certainly aware of the Oklahoma case, and yes, it is consistent authority. I was focusing on decisions at the appellate level. In that regard, I'll just say again that there are many cases, including *Remington Arms* and others, that say that compliance with the law is irrelevant if there is an endangerment.

Jessica Culpepper: In *Oklahoma v. Tyson Foods*, I think it's critical to note that the plaintiffs never argued that the manure was being mismanaged. They never said that the facility was applying too much to the field, and so there would have been a discard there. They never raised it. They never denied the defendant's claim that there was no discard because the facility was applying in rates that were agronomic, meaning in rates that can be taken up by the crop.

The crux, I think, in this case in terms of the land application issue, is that the plaintiffs in *Cow Palace* argued that

32. *No Spray Coal, Inc. v. City of New York*, 252 F.3d 148, 31 ELR 20707 (2d Cir. 2001) (rejecting argument that spraying pesticide along city streets misused the chemical and was "tantamount to a disposal" that rendered it a "solid waste").

33. *Oklahoma v. Tyson Foods, Inc.*, No. 05-CV-329 (N.D. Okla. Sept. 29, 2008).

the application of manure and nitrates was not agronomic. It was not being used for the crops; therefore, that's a discard. I wanted to make that clarification in terms of distinguishing *Tyson Foods*. I briefed the *Cow Palace* case, and all of the points mentioned by Dale were brought to light in the summary judgment phase.

This intertwines with the other point I want to make, which is that if you are using manure as fertilizer, it isn't a discard, but it also doesn't cause a RCRA violation. So, if you're using your manure properly, it's being taken up by the crops, then it's not going to cause a violation. And I think their NMP, the Washington State nutrient management plan, states that its primary purpose is to "provide the dairy manager with best management practices for the production, collection, storage, transfer, treatment and agronomic utilization of the solid and liquid components of dairy nutrients"—and here is the key—"in such a manner that will prevent the pollution or degradation of state ground water and surface water."

So, that plan created by the state that Cow Palace had to comply with, its whole purpose was to stop what was happening. If they had been following that plan, there wouldn't be a RCRA violation. If a facility is using an accurate agronomic plan, not an estimate, but a plan based in reality, then the facility is not going to have a RCRA violation. They are not going to be liable under this.

Another point I want to make goes to Dale's statement that estimates are the best that a farmer can do. I don't think that's true. I think that in this case, at least, the NMP agrees. The plan warrants that "the application rates discussed in the following sections"—and so the estimates—"are based on the average values listed previously and may need to be adjusted according to actual test results." That was never done in this case. They only used the average values, which were very optimistic values, and they never altered them according to actual test results as required by the dairy NMP.

So, along these lines, in the following section, the plan requires Cow Palace and any dairy operating in Washington to obtain a "nutrient analysis for all sources of organic and inorganic nutrients." So, they do provide an estimate, and I think that's a good way to let the facility start off. But then they've got to go to their lagoons; they've got to go to their compost piles; and they've got to take samples. They have to actually see what the amount of nitrates is in their liquid and solid waste before applying it. Do not use the estimate; use the actual analysis.

Similarly, the dairy NMP too requires the dairies to sample the nutrient residuals found in soils. The plan requires that to be done and they never did it. The plan says that regular testing for soil before crop application has to be done annually post-harvest, in fall and spring. So, they need to see what was taken up over the summer before the winter, and then they need to do it again in the spring to see what's going on after the winter.

There are six or seven other points and all of these were brought up by both sides in the litigation and contested in

the statements of material facts. But to say that estimating is the best a farmer can do, it's just not true. I think it's been relied upon by this industry, but that goes back to my overall point, which is that it is time for the industry to accept that they have to basically see what's really going on. They can't use an average anymore. The technology to see what's happening is very simple. And then the industry can actually use their manure as fertilizer and there will be no problem.

Dale Mullen: What a great chance to talk about a very serious issue on both sides, and I know that there are deeply held feelings. If what Jessica suggests needs to be done is true, then that, I respectfully say, would require a change from Congress. Currently, you have to look at the words that the law provides. In some of the cases that Craig relied on, specifically *Safe Air*, the residue from fertilizer is not discarded when only a portion of it actually aids the field. It's simply not discard. That's by the plain meaning of the statute.

In *Tyson Foods*, while there are some differences—and Jessica is correct about some distinctions between that case and *Cow Palace*—and if this is simply a case that says you must follow your NMP, then I say fine. Farmers have known that for a very long time. If it simply says we reach this conclusion because the NMP wasn't followed, then fine. That makes it a different matter entirely. But to conclude that simply because 100% of available nutrients aren't utilized then it somehow becomes discarded, that conclusion simply doesn't work in real life. Remember that this is animal agriculture. There are millions of acres of row crops across the country unrelated to animal agriculture that do not have an NMP. Your lawn doesn't have an NMP. Nor do golf courses. In those cases, excess application of fertilizer is suddenly converted under a strict interpretation of this judge's ruling in *Cow Palace* into disposal of solid waste, and that is simply not what Congress intended.

Back to the idea of an estimate: Let's say as an example that you applied pre-plant fertilizer in an agronomic rate. Let's assume that it's true for this example. You plant your seed. Your seed begins to emerge. And then you have a drought and there is no harvest and no usage of nitrogen. That nitrogen doesn't sit at the root zone. It's going to stay in the soil. It's going to leach out. It's going to leach down. It's going to run away. Has that nitrogen suddenly become abandoned, discarded, suddenly become solid waste because none of it was used and now it's migrated beneath the top two feet? Absolutely not. No one would think that.

All of farming is a gamble. You do it based on best estimates of what you think will happen, and you do it in accordance with law. If you do and if you are following your plan, you should not be found in violation and required not only to do remediation, but also to pay millions of dollars in attorneys fees, which I suspect is also a remedy that is sought commonly in these kinds of cases.

Bruce Myers: It really is a great conversation. In fact, some of the comments that you just made, Dale, are a great pivot to the first audience question that we've received. The question is: Please discuss the likelihood that the definition of manure as solid waste could be expanded to other kinds of fertilizer use. For example, express application of commercial fertilizer? It's really a question for anyone; perhaps starting with Craig.

Craig Johnston: I think the answer is yes. But again, I want to point out that under both the open dumping provision and in the context of the endangerment claims, the mere fact that there is a solid waste does not mean that there is a viable cause of action. In either context, you have to have the other elements as well.

I want to react a bit to what Dale said. First of all, let me point out that all of the case law that we're all talking about here is not binding in any circuit other than the circuit in which the cases were announced. This is only a district court opinion that we're spending all this time on today. Not that it isn't important, but I do want to remind everybody that in none of these contexts are we talking about well-settled law. All I'm really pointing out is the courts have always said that if you do have something that is abandoned in the environment, that it can be considered waste, and that would apply to any application of fertilizer. But again, the other elements still exist as well.

Dale Mullen: The question as I understand it is: Could this be applied not only to organic fertilizer, but also to manufactured fertilizer? If that's the question, the answer is yes. Craig is right to remind us that this is simply a district court case. Not that it isn't important and no disrespect intended, but it only extends as far as it does. But the answer to the audience question is certainly yes. For that reason, it's something that needs to be watched. It is, in my opinion, an extension with an unintended consequence that could potentially apply. Because, look, plants need nitrogen. I don't care if it comes out of the back of a chicken or if it comes out of the back of a cow or if it comes out of the back of a truck. Plants need nitrogen and it's going to be applied. It's simply a part of the cropping cycle. And in some instances, it's going to be applied with great rigor. Nobody's going to waste it because it's expensive in any form, but there will be occasional overapplications. So, yes, that could apply to a commercially manufactured nitrogen as well.

Bruce Myers: Let's turn to reading the tea leaves. What do we think is going to happen with this case on appeal to the Ninth Circuit? What are the prospects for this to multiply and create jurisprudence in other circuits around the country? My understanding is that the defendants did seek a certification for interlocutory appeal in the course of the proceedings, and the district court denied that request.

Dale Mullen: Reading and listening to the comments, I think that there are enough issues of material fact that it

might likely be sent back down for trial. I think there may have been an attempt for an interlocutory appeal, but it may have been denied. Jessica probably knows more about that than I do. But I think that there are some genuine issues of material fact present that warrant trial. I think that these farms deserve their day in court. And if there's a battle of the experts, then that needs to be held in front of a jury. That's where those kinds of fights belong, not in motions for summary judgment.

Second point: Reading the tea leaves for the industry, I will say you've got to pay attention to this because I know with certainty that Jessica and her colleagues are paying attention. They have to see this as a potential extension of the application of RCRA. They certainly have one good district court case to cite, although we have a raft of other circuit court and district court cases that say the opposite. But the bottom line for the farmers for whom I work—usually they come to me and say, "What is it going to take for us to get into compliance or what's it going to take for us to be in compliance? Give me some certainty. What are some things that I can do?" And I can tell you from my own practice that helping farmers with their lagoon management, their nutrient management, and residuals management for all industries is a huge part of providing good service for clients.

Nobody cares as much about the environment as a farmer does. They live in those communities. These are family farms. I will tell you with Cow Palace and their related farms, those are truly family farms. They were built by families over the course of the last eight or nine decades, and they're operated by families today. They love the land. They want to protect the environment, and they just want to do the right thing. Maybe this is an opportunity for us to help them improve and let them do that, and that's really how I'm looking at it.

Jessica Culpepper: Why don't I address this procedurally first (because I think you all know that I believe we'll win on appeal). Procedurally, yes, the defendants moved for an interlocutory appeal. We felt highly confident that the motion would be denied, given that the remedies trial was so soon in the future so why not just finish the case and send the whole thing up? The court did deny it. We entered into some settlement negotiations. The defendants, not only Cow Palace, but the other defendants as well, filed a kind of stipulation of liability. By that, I mean that they filed a stipulation saying that they believe that the court would find against them, which I think is probably somewhere in between.

But they agreed to line their lagoons. Whether or not the lagoons met the NRCS standards, they're going to line them. They agreed to provide bottled water to a wider swath of residents who were impacted. In return, we put everything off.

What's going on now [February 2015] is that to keep the case on the docket, we've all agreed to have a joint trial on the remedies. If there is not a settlement before that,

part of the stipulation was also that all parties, including the plaintiffs, said that they would make earnest attempt to resolve this in settlement. If not, there will be a joint remedial trial for all of the plaintiffs, all four remaining dairies, scheduled for May 11, 2015. After that, all of the dairies reserve their right to appeal. They can attempt to do so after that trial if we don't resolve things in settlement.³⁴

Craig Johnston: As for reading the tea leaves, I assume that there will be many other lawsuits filed and the issue won't be left with just these two district courts. In a way, I hope this case is taken up on appeal because to my mind, these are good facts in terms of establishing the proper application of, particularly, the endangerment provision. I think even Dale would concede that where you have gross overapplication, that's problematic from his clients' perspectives in terms of whether a court would be likely to find that to be discardable waste. And I think, at least according to the record from the district court, that's all we have here.

Secondly, I think there's a very strong case for the endangerment claim, the ISE claim. Good facts make good law; bad facts make bad law. In some ways, this is a case I would love to see go up to the Ninth Circuit.

Bruce Myers: Next question: What, if any, implications could we potentially see with respect to other types of waste, perhaps outside of the agriculture sector altogether?

Craig Johnston: I think that this is part of a larger puzzle and that it goes well beyond the agricultural context already. I have some small problems with the applicability of the *Ecological Rights Foundation* case and with the *Bur-*

lington Northern case³⁵ that is included in Dale's materials (although I don't think either one of them is particularly pertinent here). But to my mind, there's a broad agreement by the courts in general that where you have something that clearly does involve discard and where there is a clear environmental problem, then the endangerment provisions can be used regardless of compliance with other state or federal laws in general and regardless of whether there's fault. So, I see this as being consistent with the larger body of law, but also as being indicative of the fact that the endangerment provision can be used in many other contexts as well.

Dale Mullen: First, to clarify my lagoon comments, all soil types are different, all lagoons are different. Lined lagoons are certainly a good thing. To speak to your point, they provide a better opportunity to manage residuals. As for the broader significance of *Cow Palace*, I think that what you're going to see in the industry because of this case is a greater focus not only in the farm industry, but also for anyone who happens to have any kind of a lagoon or similar system who is managing compost. It occurs to me that there are many utilities that are currently composting biosolids. I think most current state permits would require them to do it on a lined surface or a concrete pad of some kind. But there's going to be a renewed focus on lagoon management, nutrient management, and managing residuals in a way that avoids the problem that this case appears to create. So, yes, I do think that there is a clear opportunity for this to extend beyond the agricultural industry.

Bruce Myers: We're out of time. Many thanks to our audience and to our panelists for a substantive, thoughtful, and passionate dialogue.

34. All the cases settled and filed consent decrees on May 11, 2015. The court adopted them and judgment was entered in favor of the Plaintiffs in all three cases on May 19, 2015. See <http://www.publicjustice.net/sites/default/files/395%20-%20Cow%20Palace%20Consent%20Decree.pdf>.

35. *Burlington N. & Santa Fe Ry. Co. v. Grant*, 505 F.3d 1013 (10th Cir. 2007).