

IN THE UNITED STATES COURT OF APPEALS  
FOR THE FIFTH CIRCUIT

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No. 94-30419

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UNITED STATES OF AMERICA, ET AL.,  
Plaintiffs,  
UNITED STATES OF AMERICA,  
Plaintiff-Appellee,  
Cross-Appellant,  
versus  
MARINE SHALE PROCESSORS,  
Defendant-Appellee,  
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SOUTHERN WOOD PIEDMONT COMPANY,  
Intervenor-Appellant,  
Cross-Appellee.

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Appeal from the United States District Court  
for the Western District of Louisiana

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April 18, 1996

Before REYNALDO G. GARZA, KING, and HIGGINBOTHAM, Circuit Judges.  
HIGGINBOTHAM, Circuit Judge:

This is an appeal and cross-appeal from a Rule 54(b) judgment in favor of a company attempting to clean up its hazardous waste sites. It is one of the trio of cases described in United States v. Marine Shale Processors, Inc., No. 94-30664. We vacate the judgment and remand.

From 1923 to 1985, Southern Wood Piedmont Company operated several wood treatment facilities designed primarily to manufacture railroad ties and telephone poles. These facilities treated wood with preservatives such as creosote and pentachlorophenol, leaving behind acres of soil contaminated with toxic wastes. Facing slackening demand, SWP in 1985 decided to close its facilities and clean up its waste sites. It sought to avoid regulation under the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901-92K, and liability under The Comprehensive Environmental Response, Compensation & Liability Act, 42 U.S.C. §§ 6901-75, by recycling its contaminated soil into a product covered by EPA regulations known as the Product Rule. See 40 C.F.R. § 266.20(b). If SWP were successful in recycling its hazardous waste into a product covered by the Product Rule, the resulting material could be placed on the ground without violating RCRA. Relying in part on its own investigation and in part on letters from the Louisiana Department of Environmental Quality stating that Marine Shale Processors, Inc. was a legitimate recycler of hazardous waste, SWP contracted with MSP to dispose of SWP's contaminated soil.

From 1986 to 1989, ninety-five percent of the material SWP sent to MSP arrived in shipments called "campaign runs." In a campaign run, MSP earmarked one to two weeks of kiln time to process SWP's soil exclusively. Until 1989, MSP processed the other five percent of SWP's material together with whatever other material happened to be available at the time. In 1989, SWP and

MSP modified their contract so as to require MSP to process SWP's material separately from all other materials. Before beginning a campaign run pre-1989 or any SWP processing post-1989, MSP purged its kiln but not its baghouses or its oxidizers.

This appeal concerns SWP's intervention in the suit described in No. 94-30419. SWP's complaint in intervention alleged that "MSP has taken delivery of certain material from [SWP] . . . and, using its thermal process, has made a product from that material." The complaint in intervention further alleged that SWP's soil "[was] and at all times has been processed by MSP separately from material from other sources." SWP sought a declaratory judgment that the Product Rule exempted the material produced from its contaminated soil from RCRA regulation.

The district court submitted interrogatories to the jury. The jury returned answers to some of these questions and found itself unable to agree on others. The interrogatories relevant to this appeal, together with the jury's answer if any, are set out below:

1. Was MSP entitled to a recycler exemption from the requirement of a permit as an operator of an incinerator of hazardous waste? (unable to answer)

2. Were all of the hazardous wastes accepted by MSP beneficially used or reused or legitimately recycled? (unable to answer)

2(a). Were all of the hazardous wastes accepted by MSP prior to August 21, 1991, beneficially used or reused or legitimately recycled? (unable to answer)

3. Was the material produced by MSP from Southern Wood Piedmont Company's waste a "product" produced for the general public's use? (yes)

4. Did the waste material received by MSP from Southern Wood Piedmont Company undergo a chemical

reaction in the course of processing the material so as to become inseparable by physical means? (yes)

5. Was the material produced by MSP from waste other than Southern Wood Piedmont Company's waste a "product" produced for general public's use? (unable to answer)

6. Did the waste material produced by MSP from waste other than Southern Wood Piedmont Company's waste undergo a chemical reaction in the course of processing the material so as to become inseparable by physical means? (unable to answer)

Because the jury found itself unable to answer interrogatories 1, 2, 2(a), 5 and 6, among others, the district court declared a mistrial. Based on the jury's affirmative answers to interrogatories 3 and 4, SWP moved for the entry of judgment under Fed. R. Civ. P. 54(b). District court judge Duplantier obliged and entered an order stating in relevant part:

[A]ll material produced by Marine Shale Processors, Inc. from Southern Wood Piedmont Company materials processed separately from other materials satisfies all criteria of 40 C.F.R. § 266.20(b) and corresponding Louisiana regulations, and, as such, is not subject regulation as a hazardous waste . . . . (emphasis added)

SWP objects to the emphasized portion of the district court's judgment. On appeal, SWP asks this court to modify the judgment to read as follows:

[A]ll material produced by Marine Shale Processors, Inc. from Southern Wood Piedmont Company materials satisfies all criteria of 40 C.F.R. § 266.20(b) and corresponding Louisiana regulations, and, as such, is not subject to regulation as a hazardous waste . . . .

The dispute on this issue focuses on the fact that MSP often mixed metal-bearing baghouse dust with material emerging from its kiln in a slagging process. Because MSP did not clean its baghouses before processing SWP waste, the material produced from the processing of

SWP's contaminated soil was mixed with quantities of toxic metals from other sources.

On cross appeal, the United States contends that the district court erred in entering a Rule 54(b) judgment for several reasons. The United States first attacks the judgment in favor of SWP on the ground that the district court improperly entered judgment when the jury had been unable to answer the question of whether MSP was engaged in a process of legitimate recycling. Second, the United States contends that the district court erred in holding that MSP had obtained an express exemption from the Louisiana Department of Environmental Quality as required by Louisiana Regulations operating in lieu of the federal Product Rule. See 42 U.S.C. § 6926(b). Third, the United States argues that the court gave erroneous jury instructions addressed to interrogatory 3. Finally, the United States contends that the district court abused its discretion on certain evidentiary rulings.

We discuss the issues raised by the United States' cross appeal first. Because we agree with the United States on some of the contentions in its cross-appeal, we vacate and remand. Given our disposition of the United States' cross-appeal, we do not reach the questions posed by SWP's appeal. On remand, the district court may choose to structure additional or substitute interrogatories so as to eliminate any dispute springing from the ambiguity in the language of questions three and four.

The United States argues that the district court improperly entered a Rule 54(b) judgment in the absence of a jury resolution on the question of whether MSP was engaged in a process of legitimate recycling. According to the United States, the federal Product Rule<sup>1</sup> exempts a product produced for the general public's use only if the product emerges from a process of legitimate, as opposed to sham, recycling. Because the jury failed to answer interrogatories 1, 2, and 2(a), the United States argues, it had failed to determine the analytically prior issue of whether MSP was engaged in legitimate recycling. Thus, the district court abused its discretion by entering a Rule 54(b) judgment when the jury had not decided all issues relating to the SWP declaratory judgment.

40 C.F.R. § 261.6(a)(2) declares that "recyclable materials used in a manner constituting disposal" are "not subject to [regulation as listed or characteristic wastes] but are regulated under subpart[] C . . . of part 266." The Product Rule appears in Subpart C of part 266; this regulation provides,

Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation if the recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means and if such products meet the [treatment standards for land disposal]

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<sup>1</sup> We address here the content of the "federal Product Rule" even though, as we explain in the next section, Louisiana has operated its own RCRA program under 42 U.S.C. § 6926(b) since 1985. The parties have assumed throughout this case that the only difference in content between the Louisiana and federal product rules is the one discussed in the next section. We use the more accessible version of the regulations contained in the Code of Federal Regulations, as opposed to the less widely distributed Louisiana Administrative Code, throughout this opinion.

for each recyclable material (i.e. hazardous waste) that they contain.

40 C.F.R. § 266.20 (alterations added). Accordingly, in order to be exempt from regulation under the Product Rule, a substance must (1) be produced for the general public's use, (2) used in a manner that constitutes disposal, (3) contain recyclable materials, (4) have undergone a chemical reaction during the production process so as to be inseparable by physical means, and (5) meet land ban standards for each hazardous waste it contains. The United States focuses on the third element.

The third element of the Product Rule requires that the substance at issue contain recyclable materials. "Hazardous wastes that are recycled will be known as 'recyclable materials.'" 40 C.F.R. § 261.6(a)(1). "A material is "recycled" if it is used, reused, or reclaimed." 40 C.F.R. § 261.1(c)(7).<sup>2</sup> "A material is 'used or reused' if it is . . . [e]mployed as an ingredient (including use as an intermediate) in an industrial process to make a product." 40 C.F.R. § 261.1(c)(5)(I). Accordingly, in order for its substance to meet the third element of the product rule, a facility must have employed the hazardous waste as an ingredient in an industrial process to make a product. Mercifully, the regulatory definitions end here; the regulations do not define the terms "ingredient" or "industrial process."

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<sup>2</sup> Despite the government's implication, these definitions do apply to Part 266. Section 261.1(c) establishes that its definitions are "[f]or the purposes of §§ 261.2 and 261.6." 40 C.F.R. § 261.6(a)(2)(I) refers specifically to Part 266. Nothing in 40 C.F.R. § 261.2(e)(2) limits the scope of these definitions.

The United States points out that EPA has consistently interpreted the Product Rule to include a requirement that the substance at issue be produced from a process of legitimate, as opposed to sham, recycling.<sup>3</sup> According to these documents, sham recycling, as opposed to legitimate recycling, occurs when the hazardous waste purportedly recycled contributes in no significant way to the production of the product allegedly resulting from the recycling. One EPA publication, in the midst of discussing an example involving the recycling of hazardous waste to produce aggregate in an aggregate kiln, states that legitimate recycling is occurring if "the prohibited hazardous wastes and their hazardous constituents do contribute legitimately to producing aggregate."<sup>4</sup>

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<sup>3</sup> See Final Rule, Hazardous Waste Management System; Definition of Solid Waste, 50 Fed. Reg. 614, 638-39, 646 n.36 (1985) (articulating sham recycling criteria); see also Final Rule, Land Disposal Restrictions Phase II -- Universal Treatment Standards, and Treatment Standards for Organic Toxicity Characteristic Wastes and Newly Listed Wastes, 59 Fed. Reg. 47,982, 48,026 n.1 (1994); Proposed Rules, Land Disposal Restrictions for First Third Scheduled Wastes, 53 Fed. Reg. 17,578, 17,605-06 (1988); Proposed Rule and Request for Comment, Identification and Listing of Hazardous Wastes; Amendments to Definition of Solid Wastes, 53 Fed. Reg. 519, 522 (1988); Proposed Rule and Request for Comment, Hazardous Waste Management System: General, 48 Fed. Reg. 14,472, 14,474 (1983); Enforcement Guidance, 48 Fed. Reg. 11,157, 11,158 (1983); United States v. Self, 2 F.3d 1071, 1079 (10th Cir. 1993) (referring to "EPA's long-standing distinction between legitimate and sham burning for energy recovery").

<sup>4</sup> Proposed Rules, Land Disposal Restrictions, 53 Fed. Reg. at 17,606; see also Proposed Rules, Land Disposal Restrictions--Supplemental Proposal to Phase IV, 61 Fed. Reg. 2338, 2343 (1996) ("Sham recycling is, of course, nothing more than waste disposal or waste treatment."); Burning of Hazardous Waste in Boilers and Industrial Furnaces, 52 Fed. Reg. 16,982, 16,989 (1987) (discussing previous EPA policy of presuming that the burning of materials with less than a specified BTU/lb ratio constituted sham recycling because combustion of such materials was not an efficient method of producing heat).



In other words, the sham versus legitimate recycling inquiry focuses on the purpose or function the hazardous waste allegedly serves in the production process. If the waste does not in fact serve its alleged function in the process, then sham recycling is occurring.

Although the text of 40 C.F.R. § 266.20(b) itself does not mention sham or legitimate recycling, the distinction is inherent in the language “[e]mployed as an ingredient . . . in an industrial process to make a product” in 40 C.F.R. § 261.1(c)(5)(I). A hazardous waste is not “employed as an ingredient” if it contributes in no legitimate way to the product’s production. EPA’s interpretation of its own regulation as including a distinction between sham and legitimate recycling is entitled to deference. Ford Motor Credit Co. v. Milhollin, 444 U.S. 555, 566 (1980). In this case, the interpretative exercise is fairly straightforward. A substance cannot be an ingredient in making something if it is merely along for the ride.

We agree with the United States that the district court should not have entered a Rule 54(b) partial judgment without deciding whether MSP was engaging in sham versus legitimate recycling. To illustrate our reasoning, we provide the following examples. Hypothetical Facility A generates a large amount of liquid organic waste. In order to rid itself of the waste, Facility A heats the liquid to very high temperatures in the presence of oxygen, causing the carbon and hydrogen in the organic waste to burn away. The temperatures in the heating device are so high as to make

irrelevant any heat contribution from the burning of the organic waste.<sup>5</sup> Facility A has incinerated, not recycled, its organic waste. To the extent that Facility A has made a product, it has done so without using its hazardous waste.

Hypothetical Facility B also generates a large amount of liquid organic waste. In order to rid itself of the waste, the facility dumps it into soil. Facility B then digs up the soil containing the waste and heats it to very high temperatures in the presence of oxygen, causing the carbon and hydrogen in the organic waste to burn. The temperatures in the heating device are so high as to make irrelevant any heat contribution from the burning of the organic waste. The soil, however, conglomerates together and forms something that Facility B calls "aggregate." Under such circumstances, Facility B has not recycled its hazardous waste. The only difference between Facilities A and B is that Facility B dumped its waste in soil first. If the organic waste provides neither energy nor materials, then the organic material contributes nothing to the production of the "aggregate." Facility B could have manufactured the exact same "aggregate" by dumping virgin soil into its heating device.

SWP argues that producing a product is recycling. This contention ignores the fact that the hazardous waste in MSP's

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<sup>5</sup> An easier case is presented if the organic compound is a low energy hazardous waste, thus making it an inappropriate fuel. In a third possibility, the facility does not use the lion's share of the heat produced from the burning of its organic waste. See Marine Shale Processors, Inc. v. United States Environmental Protection Agency, No. 95-60228, at 22-23.

"feedstocks" may simply be along for the ride. At bottom, SWP's argument depends on the idea that soil contaminated with organic waste is a fundamentally distinct substance from the organic waste itself. We do not agree. See Chemical Waste Management, Inc. v. Environmental Protection Agency, 869 F.2d 1526, 1539 (D.C. Cir. 1989) (holding that EPA could reasonably reject the argument that "an agglomeration of soil and hazardous waste is to be regarded as a new and distinct substance"). Incineration does not cease to be incineration when one dumps the waste to be incinerated into a temporary medium like soil.

In Marine Shale Processors, Inc. v. United States Environmental Protection Agency, No. 95-60228, at 17-26, we held that EPA could conclude that MSP is burning its organic wastes for destruction, and thus that the waste is not recycled or reclaimed or reused. This holding supports our conclusion that, at minimum, an issue of fact exists as to whether SWP's organic waste is a legitimate ingredient in the production of any Marine Shale product. Accordingly, we vacate the district court's Rule 54(b) judgment and remand for further proceedings. We express no view as to the sufficiency of the evidence to support a jury finding in favor of or against SWP, nor regarding any possible preclusive effect of EPA's conclusions in number 95-60228.

### III

The United States argues that the district court erred by issuing a declaratory judgment because the court mistakenly held

that MSP had complied with a Louisiana regulation including a more stringent requirement than the federal Product Rule. Specifically, the government refers to the Louisiana counterpart to the federal Product Rule, L.H.W.R. § 33.V.4139.A.2, formerly L.A.C. § 22.20(a)(2). This Louisiana regulation, the government contends, included a requirement that LDEQ issue an exemption before the facility could place a recycled product on the ground under the Product Rule. The United States asks us to render judgment on the ground that the district court erred in determining that LDEQ issued an exemption to MSP.

A

RCRA is an exercise of federalism. Congress initially required EPA to promulgate regulations governing the treatment of hazardous waste from cradle to grave. 42 U.S.C. § 6921. EPA complied with the congressional order in 1980, and promulgated what became a federal regulatory floor. See, e.g., 40 C.F.R. pts. 260-272. Under 42 U.S.C. § 6926(b), however, states could assume primary responsibility for RCRA enforcement by developing their own programs, which EPA would approve after a review to assure that the state program provided for a level of regulation at least as high as the federal floor. See 40 C.F.R. pt. 271. RCRA expressly allowed states to impose regulations more stringent than those outlined in the federal floor. 42 U.S.C. § 6929. 42 U.S.C. § 6928(a) gave EPA the power to enforce the substance of an approved state's program against private parties in that state.

42 U.S.C. § 6929 imposed a duty upon approved states to maintain their RCRA programs at a level at least as stringent as the federal floor. Because EPA often amended the regulatory scheme governing the treatment, storage, and disposal of hazardous wastes, approved states also had to enact conforming amendments. 40 C.F.R. § 271.21<sup>6</sup> provided a procedure governing EPA scrutiny of state program amendments. This process required the state to submit its proposed alterations to EPA; EPA then approved or disapproved of the amendments depending on whether they maintained a level of regulation at least as high as the federal floor. 40 C.F.R. § 271.21(a-b).

Between 1980 and 1985, Louisiana constructed its RCRA program and sought EPA approval under 42 U.S.C. § 6926(b). In 1985, EPA amended its floor regulations and promulgated what became the federal Product Rule. Final Rule, Hazardous Waste Management Systems; Definition of Solid Waste, 50 Fed. Reg. 614, 666 (1985); see 40 C.F.R. § 266.20(b). The previous section outlined the substance of the federal Product Rule; briefly, it allowed facilities that recycled hazardous waste into products for the general public's use to place these products on the ground without violating RCRA. Very shortly after promulgating the federal Product Rule, EPA approved Louisiana's RCRA program. Notice of Final Determination on Louisiana's Application for Final

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<sup>6</sup> No party has argued that EPA lacked the power to promulgate 40 C.F.R. § 271.21, or that the operation of section 271.21 is unconstitutional. See New York v. United States, 505 U.S. 144 (1992).

Authorization, Louisiana; Decision on Final Authorization of State Hazardous Waste Management Program, 50 Fed. Reg. 3348 (1985). Because of the short time between EPA promulgation of the federal Product Rule and its approval of the Louisiana submission, Louisiana's program had no counterpart to the Product Rule. Instead, the Louisiana program included a counterpart to the general exemption in the original 1980 floor regulations.

The federal Product Rule as promulgated in 1985 was self-executing. That is, a facility did not have to obtain an express permit or exemption from EPA before operating under its terms. If a facility violated the terms of the federal Product Rule by, for instance, placing non-recycled hazardous waste on the ground, then the facility was subject to administrative penalties or an enforcement action. Louisiana's counterpart to the federal Product Rule was L.H.W.R. § 22.20(a)(2), superseded by L.H.W.R. 33.V.4139.A.2. This provision, unlike the federal rule, was not self-executing. It provided that facilities meeting certain conditions "may be exempted by the Administrative Authority" and thereby allowed to place a product resulting from the recycling of hazardous waste on the ground.

The parties agree that the following fairly unusual chain of events occurred regarding L.H.W.R. § 22.20(a)(2). For reasons not addressed in the record Louisiana did not submit the Louisiana Product Rule for EPA approval until May 16, 1989. The submission included the version of the Louisiana Product Rule requiring a facility to obtain LDEQ approval before placing recycled materials

on the ground. Four days later, LDEQ deleted the provision requiring LDEQ approval and made L.H.W.R. § 20.22(a)(2), now L.A.C. § 33.V.4139.A.2, self-executing. LDEQ did not, however, change its submission to EPA. As a result, when EPA approved the Louisiana amendments effective January 29, 1990, see Immediate Final Rule, Louisiana: Final Authorization of State Hazardous Waste management Program Revisions, 54 Red. Reg. 48,889 (1989), it approved the version of the Louisiana Product Rule requiring that LDEQ grant an express exemption in order to allow a facility to place products on the ground.

B

The above discussion illustrates that the United States' argument implicates at least three separate questions. First, when, if ever, did EPA become able to enforce the requirement that a facility wishing to take advantage of the Product Rule's exception from RCRA regulation receive an express exemption from the "Administrative Authority"? Second, did LDEQ, which all parties have assumed to be the "Administrative Authority" specified in the Louisiana Product Rule, in fact issue an exemption to MSP? Third, if LDEQ did issue an exemption at one time, did LDEQ later revoke it?

The first question depends in part upon a construction of 40 C.F.R. § 271.21. We note that the parties have assumed, and Marine Shale has expressly argued in a separate section of its brief, that an authorized state's attempt to alter, amend, or repeal a portion of its own regulations does not become effective in the state until

approved by EPA pursuant to section 271.21. The operation of this regulation may raise significant statutory and constitutional concerns.

The record on the latter two questions is, to say the least, equivocal. LDEQ issued a series of letters to MSP generally suggesting that MSP's operations were in compliance with many Louisiana regulations. None of these letters mentioned the Louisiana Product Rule, and many occurred before that rule took effect in Louisiana. Some years later, LDEQ issued orders to MSP that the United States has argued constituted revocations of any previously issued exemptions. Some of these letters and orders were the subject of conflicting deposition testimony. In particular, two LDEQ officials gave polar opposite interpretations of a June 9, 1986 letter from LDEQ to MSP. To some extent, the resolution of whether LDEQ issued an exemption may require findings of fact depending on the credibility of witnesses.

The district court expressly noted that the exemption issue remained outstanding at several stages of the litigation below. The parties have cited to no place in the record, however, in which the district court focused on the three questions outlined above. The judgment issued by the district court included a declaration that certain material "satisfied all criteria of 40 C.F.R. § 266.20(b) and corresponding Louisiana regulations." From this phrase, we are unable to determine whether the district court held that the Administrative Authority exemption requirement was never



enforceable by the United States,<sup>7</sup> and thus did not constitute a "corresponding Louisiana regulation," or that LDEQ had issued an exemption to MSP that remained in effect.

Because the district court did not issue express findings of fact and conclusions of law on this question, we are uncertain as to the scope and grounds of its decision. Our uncertainty renders appellate review on this matter difficult; this difficulty is particularly acute because resolution of the last two of the three above questions may depend on credibility determinations properly made by the district court. Under such circumstances, we think it proper to vacate any finding that the district court made on this question and remand for further proceedings consistent with this opinion. We note that no party has suggested, and we do not believe, that the presence or absence of an exemption from the Administrative Authority affects a facility's duty to comply with the substantive requirements of the Product Rule. Accordingly, our remand on this issue leaves unaffected any of our holdings or the jury's findings on the Product Rule's substantive criteria; should the district court decide this case on MSP's failure to meet one of the substantive criteria of the Product Rule, it may not need to reach the exemption question.

#### IV

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<sup>7</sup> Although LDEQ intervened in this litigation, the terms of the district court's order allowing the intervention appear to prevent LDEQ from arguing in this suit that state law unenforceable by EPA imposed an Administrative Authority exemption requirement.

The United States argues that the district court committed two fatal errors in its jury instructions.<sup>8</sup> First, the United States argues that the district court erroneously failed to include an interrogatory and a jury instruction regarding whether any product manufactured from the recycling of SWP's waste met land ban standards. Second, the United States argues that the district court erroneously defined the phrases "for the general public's use" and "inseparable by physical means."

A

We do not discuss the United States' land ban argument because the United States waived it below. At the charging conference, MSP asked the district court for a directed verdict on the issue of whether the material produced from the process of SWP soil met land ban standards. Judge Duplantier stated, "I'm not directing a verdict on it. There is just nothing to be said about it." Counsel for the United States responded, "No contest." The district court had by this time made clear that it would consider all matters orally raised at the charging conference preserved for appeal. Regardless of the content of the submissions before the charging conference, the United States at this point in the trial

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<sup>8</sup> Despite the fact that we vacate and remand the district court's Rule 54(b) judgment on other grounds, we reach the United States' arguments concerning instructional and evidentiary error. Had the United States identified harmful error, we would have been obligated to vacate the jury's responses to interrogatories 3 and 4 and remand for a new trial on those matters. Judicial economy counsels that we reach these issues now, so that any error may be corrected in a single proceeding on remand.

agreed that nothing need be said to the jury regarding the application of land ban standards to the SWP material.

B

The United States argues that the court improperly instructed the jury regarding the meaning of the federal Product Rule's requirement that the product be "produced for the general public's use." The court instructed the jury on this subject as follows:

MSP must prove . . . that there is a known market for its materials for the general public's use, not just for MSP's own use.

. . . When you consider [interrogatory numbers 3 and 5], you should consider all of the evidence concerning the sales by MSP and its use of the material on its own property prior to the court order of August, 1991. After that court order, sales were restricted to [MSP's sister corporation, Recycling Park, Inc.] only, and use of the material was restricted to [RPI's property] only. So, you remember what the court order said, that after that time, of course, they couldn't produce that evidence because they couldn't sell it.

The United States first argues that the district court should not have mentioned the August, 1991 court order because that order was irrelevant to the existence of a market when MSP voluntarily ceased sales to the public a year before this order. We do not agree. The best evidence of a market for MSP's material would be evidence that MSP sold it. The court committed no error by reminding the jury why MSP could not come forward with evidence of a sale after the court enjoined it from moving the material.

The United States' second argument regarding general public use is that the district court's instruction improperly prevented the jury from considering the fact that MSP continued to produce its so-called product for years even after it was unable to

complete a sale. The court's instruction did nothing of the sort. The instruction informed the jury that it should only consider evidence of the use and sale of the product before 1991; nothing in this instruction barred the jury from considering MSP's continued production.

The United States' final attack on the jury instructions concerns the court's definition of inseparable. Taking the instruction as a whole, we hold that it sufficiently communicated to the jury that the proper question was whether the hazardous waste constituents had undergone a chemical reaction so as to become inseparable by physical means.

V

The United States also attacks three evidentiary rulings of the district court. We find any error harmless.

The first ruling concerns expert testimony. The United States called Dr. John Drexler to testify as an expert on certain geological matters. The United States sought to elicit testimony from Dr. Drexler based on data contained in a report prepared by an MSP expert hired in preparation for the litigation. The district court sustained objections to this testimony because the report was not in evidence. The United States relies on Fed. R. Evid. 703, which specifies that an expert may rely on inadmissible facts and data "of a type reasonably relied upon by experts in the particular field." MSP responds by noting that, as the Fourth Circuit has recently stated, "[r]eports specifically prepared for purposes of

litigation are not, by definition, of a type reasonably relied upon by experts in the particular field." United States v. Tran Trong Cuong, 18 F.3d 1132, 1143 (4th Cir. 1994) (internal quotation marks omitted).

That a research protocol or method was conducted in anticipation of litigation does not mean that it cannot be the type of study an expert would rely upon in expressing his opinion. At the same time, a district court may decide that the financial and other incentives of litigation pose an unacceptable risk to the objectivity and neutrality of the person gathering the data, such that the data would not normally be considered reliable in the relevant field. We note that this rationale suggests the usefulness of cross-examination of the data gatherer, a core hearsay principle. On the other hand, a district court may decide that the combination of scientific discipline and the constraint imposed by a well-accepted testing methodology provides sufficient indicia of reliability so as to make the data something that those in the field normally use. This result might be more likely when a party's own expert gathers data adverse to the party. In this case, we do not reach this question. We find any error in the exclusion of this data harmless.

Next, the United States complains that the district court improperly admitted evidence and permitted closing argument regarding the impact upon MSP of an adverse verdict, a company providing jobs to 364 citizens of Louisiana. The government also objects to MSP's characterization of this lawsuit as a government

attempt to put MSP out of business. MSP and SWP provide no explanation for the relevance of the evidence. They defend the argument by referring to the fact that, in response to MSP's attempt to elicit evidence of the economic effect of an adverse judgment, the government unsuccessfully attempted to cross-examine on the same issue, even though the district court called the government's questions "wrong and unprofessional" in the jury's presence, and even though the court struck all of the evidence and instructed the jury to disregard it. Such evidence and argument, especially where as here it lacks any relevance to issues the jury must decide, can carry the danger of significant prejudice. See Fed. R. Evid. 402, 403; Whitely v. OKC Corp., 719 F.2d 1051, 1054-55 (10th Cir. 1983). Again, we note that MSP and SWP have articulated no theory of relevance for this evidence and no credible explanation for the argument. Nevertheless, we hold that none of the trial judge's rulings substantially prejudiced the United States in this case. The district court struck all of the evidence, and the comments during argument certainly did not "so permeate the proceedings that they impair[ed] substantial rights and cast doubt on the jury's verdict." Bufford v. Rowan Companies, Inc., 994 F.2d 155, 157 n.1 (5th Cir. 1993).

Finally, the United States attacks the district court's admission of evidence proving that United States agencies sent waste to MSP for processing. We find any error in the admission of this evidence harmless.

VI

We VACATE the Rule 54(b) judgment and REMAND for further proceedings consistent with this opinion.