

**IN THE UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT**

United States Court of Appeals
Fifth Circuit

FILED

June 8, 2010

No. 08-40060

Lyle W. Cayce
Clerk

LYONDELL CHEMICAL COMPANY; ET AL.,

Plaintiffs

EPEC POLYMERS INC; EPEC CORPORATION; EL PASO TENNESSEE
PIPELINE COMPANY,

Third Party Plaintiffs – Appellees – Cross Appellants

TENNESSEE GAS PIPELINE COMPANY, formerly known as Tenneco Inc.,

Defendants – Appellees – Cross Appellants

v.

OCCIDENTAL CHEMICAL CORPORATION,

Defendant – Appellant – Cross-Appellee

Appeals from the United States District Court
for the Eastern District of Texas

Before HIGGINBOTHAM, GARZA, and PRADO, Circuit Judges.

PATRICK E. HIGGINBOTHAM, Circuit Judge:

Both sides to this appeal concede liability for environmental cleanup at a hazardous waste dump near the Houston Ship Channel but fault the district court's equitable allocation of the associated costs. More specifically, this appeal

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concerns the reliability of expert witness testimony under *Daubert*, the admission of alleged settlement communications into evidence, the district court's choice of methodologies in allocating costs, and some of the court's factual findings. We find error in the admission of settlement communications only and remand to the district court for further proceedings.

I

During the late 1960s and early 1970s, a disposal company named French Limited hauled hazardous waste from petrochemical facilities on the Houston Ship Channel. It transported this waste to a dumping site along U.S. Route 90 ("Highway 90").¹ Because that site was occasionally busy or otherwise unavailable, French Limited also took some waste to a second location known as Turtle Bayou.

In the early 1980s, the EPA and the State of Texas began an investigation into contamination at Turtle Bayou. The investigation centered on waste generated by several French Limited customers, including Lyondell Chemical Co. and the two remaining parties to this appeal, El Paso Tennessee Pipeline Co. and Occidental Chemical Co.

A

The EPA eventually issued an administrative order, demanding that one group of French Limited customers—including El Paso² and

¹ A second hazardous waste hauler, Joiner, transported waste for companies no longer involved in this dispute.

² Successor-in-interest to Tenneco Polymers.

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Lyondell,³—remediate contamination found at Turtle Bayou. Several of these customers signaled that they would comply with the order and began meeting regularly to fairly divide responsibility for the waste and associated cleanup costs. The group dissolved before finalizing a plan.

The United States responded by suing Lyondell in 1994, seeking to compel the company to clean up Turtle Bayou and to reimburse the government for its investigation and response costs under sections 106 and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”).⁴ CERCLA is Congress’s answer to the “serious environmental and health risks posed by industrial pollution”⁵ and “was designed to promote the ‘timely cleanup of hazardous waste sites’ and to ensure that the costs of such cleanup efforts were borne by those responsible for the contamination.”⁶ CERCLA imposes strict liability for environmental contamination upon four broad classes of potentially responsible parties, one of which includes entities that “arrange[] for disposal of . . . hazardous substances.”⁷ “Once an entity is identified as a [potentially responsible party], it may be compelled to clean up a contaminated area or reimburse the Government for its past and future

³ Successor-in-interest to ARCO and various ARCO subsidiaries.

⁴ 42 U.S.C. §§ 9601–75.

⁵ *Burlington N. & Santa Fe Ry. Co. v. United States*, 556 U.S. ____, ____, 129 S. Ct. 1870, 1874 (2009).

⁶ *Id.* (quoting *Consol. Edison Co. of N.Y. v. UGI Util., Inc.*, 423 F.3d 90, 94 (2d Cir. 2005)).

⁷ *Id.* at 1878 (quoting 42 U.S.C. § 9607(a)(3)) (quotation marks omitted).

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response costs.”⁸ Joint and several liability may be imposed, unless a party can prove that the harm it caused is divisible from the harm others caused.⁹

Lyondell entered into a consent decree with the United States in 1998, requiring it “to address the contamination and perform all requested response actions at four areas of the Site.” Although the “Site” was “originally defined to encompass approximately 500 acres,” it was “redefined” by reference to the scope of contamination. It now “includes the areal extent of contamination and all suitable property in very close proximity to the contamination necessary for the implementation of [Lyondell’s remediation plan].” That property was “designated” as the four areas to be remediated by Lyondell (the West Road area, the Main Waste area, the Office Trailer area, and the Power Easement area—collectively, the “Lyondell Remediation Areas”), and two other plots: the “Bayou Disposal Area” and “Country Road 126 (formerly Frontier Park Road).” Country Road 126 is an east-west road running through (or next to) the five other areas.

In exchange for cleaning up the Lyondell Remediation Areas, Lyondell received three guarantees: First, the United States agreed to forego claims against Lyondell for investigation and remediation costs it had already incurred at the Site. Second, the United States agreed that (subject to certain exceptions) it would not pursue future claims against Lyondell for “matters addressed in the

⁸ *Id.* (citing *Cooper Indus., Inc. v. Aviall Servs., Inc.*, 543 U.S. 157, 161 (2004)).

⁹ *Id.* at 1881 (citing *United States v. Chem-Dyne Corp.*, 572 F. Supp. 802, 810 (S.D. Ohio 1983)); see also *O’Neil v. Picillo*, 883 F.2d 176, 178 (1st Cir. 1989).

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settlement,” including “the entire Site and matters related to the Site.”¹⁰ And third, because it had settled with the government, Lyondell would not have to contribute to any subsequent remediation at the Site paid for by private parties.

B

During the course of its remediation efforts, Lyondell discovered additional contamination at Turtle Bayou 1,800 feet west of Lyondell’s West Road Area. This plot of newly-discovered contamination became aptly known as the Far West Road Area.

The United States filed a second CERCLA action in 2002, this time against El Paso. It sought to place the costs of remediation onto El Paso for two distinct areas: the Far West Road Area and a second area previously known to the government—the Bayou Disposal Area—for which Lyondell enjoyed contribution protection. Together, we will refer to these two plots as the “El Paso Remediation Areas.” The government also sought to hold the company accountable for certain costs associated with both the Lyondell Remediation Areas and the El Paso Remediation Areas, specifically investigation and remediation costs already incurred by the United States, and any such costs incurred in the future, plus interest.

¹⁰ The consent decree provision reads in relevant part:

Notwithstanding any other provision of this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings . . . to reimburse the United States for additional costs of response if . . . conditions at the Site, previously unknown to the EPA, are discovered.

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C

The district court consolidated the Lyondell and El Paso CERCLA actions. Following Lyondell's lead, El Paso eventually settled with the United States, agreeing to remediate the El Paso Remediation Areas and to reimburse the United States for much of its past costs.¹¹ To avoid paying for all remediation costs, however, both Lyondell and El Paso sued other parties they believed shared responsibility for cleanup of their respective remediation areas, including Occidental.¹² They brought "apportionment" actions under CERCLA section 107¹³ and "contribution" actions under CERCLA section 113.¹⁴ In an apportionment action, liability is still contested and parties "may avoid joint and several liability by establishing a fixed amount of damage for which they are liable."¹⁵ On the other hand, once liability is established in a contribution action, "jointly and severally liable [parties may] recover from each other on the basis of equitable considerations."¹⁶ Contribution actions are "thus intended to provide a liable party under CERCLA with a cause of action to 'mitigate the

¹¹ El Paso incurred \$150,000 in connection with an initial investigation, \$3,701,043 in connection with remediation efforts prior to August 31, 2006, and approximately \$6.9 million plus interest in reimbursement costs to the United States for its past cleanup efforts with respect to the Lyondell and El Paso Remediation Area—an amount that El Paso has paid.

¹² Successor-in-interest to Diamond Shamrock Chemical Corporation.

¹³ See 42 U.S.C. § 9607.

¹⁴ See *id.* § 9613(f)(1) ("Any person may seek contribution from any other person who is liable or potentially liable under 107(a) [of CERCLA].").

¹⁵ *Burlington*, 129 S. Ct. at 1882 n.9 (quoting *United States v. Burlington N. & Santa Fe Ry. Co.*, 520 F.3d 918, 939–40 (9th Cir. 2008)) (internal quotation marks omitted).

¹⁶ *Id.*

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harsh effects of joint and several liability.”¹⁷

Lyondell brought apportionment and contribution actions against El Paso, too. In response, El Paso counterclaimed pursuant to CERCLA section 113, seeking to offset any of its responsibility for the Lyondell Remediation Areas with Lyondell’s share of responsibility for the El Paso Remediation Areas. Because of Lyondell’s settlement with the United States, however, El Paso could not seek contribution for any costs associated with “matters addressed in [that] settlement.”¹⁸ El Paso and Lyondell settled these claims in 2004 and turned their attention to Occidental and other potentially responsible parties.

The district court dismissed the section 107 apportionment claims and conducted a two-phase bench trial of the remaining contribution claims under section 113.¹⁹ In the first phase, the district court found Lyondell and El Paso had established the liability of several other parties, including Occidental. It then went about allocating response costs among those liable parties. Because the evidence did not allow the damages to be divided along geographic boundaries, the court considered all Lyondell and El Paso Remediation Areas as an indivisible whole. Under section 113, the court allocated a percentage of

¹⁷ *Elementis Chromium L.P. v. Coastal States Petroleum Co.*, 450 F.3d 607, 612 (5th Cir. 2006) (quoting *OHM Remediation Servs. v. Evans Cooperage Co.*, 116 F.3d 1574, 1582 (5th Cir. 1997)).

¹⁸ 42 U.S.C. §§ 9613(f)(2), 9622(h)(4).

¹⁹ The Supreme Court has expressly declined to answer whether potentially responsible parties who “sustain expenses pursuant to a consent decree”—like Lyondell and El Paso—may recover these compelled costs “under § 113(f), § 107(a), or both.” *United States v. Atlantic Research Corp.*, 551 U.S. 128, 139 n.6 (2007). The district court, in dismissing the claims under § 107 but allowing Lyondell and El Paso to recover their compelled costs anyway, implicitly held that compelled costs may be recovered under § 113(f). Neither party challenges that holding on appeal and we do not address it.

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investigation and remediation costs of that whole to each liable party based on “equitable” culpability.

D

To assist in allocating cleanup costs among the liable parties, the district court appointed an expert in environmental engineering, Dr. Charles Newell. Among other things, the district court tasked Dr. Newell with running a statistical analysis to determine disposal volumes for each liable company. The disposal volumes, together with chemical analyses of those volumes, would then enable to the court to allocate remediation costs. Although Dr. Newell ran the actual calculations, the court determined the inputs he would use. To calculate the amount of Occidental’s waste dumped at Turtle Bayou, for example, the court instructed Dr. Newell to use three input values: a minimum, an intermediate estimate, and a maximum. These inputs are at the center of the parties’ dispute on appeal.

Pegging Occidental’s minimum responsibility was straightforward. The court heard from Ken Kimmons, a French Limited truck driver, who testified that he transported two truck loads of Occidental waste to Turtle Bayou. With one truck load equaling 2,100 gallons of waste, the court set its minimum estimate at 4,200.

In contrast, crafting the intermediate and maximum inputs required more effort because much of the available documentary evidence concerned waste disposal intended for French Limited’s primary disposal site along Highway 90—not its auxiliary disposal site at Turtle Bayou. Nonetheless, the court found the documentary evidence useful after listening to the testimony of Kimmons

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and another French Limited truck driver, Charles Thomas. From their testimony, the court found that approximately 25% of waste intended for Highway 90 actually ended up at Turtle Bayou, and adopted this finding for purposes of allocating costs. The litigants began referring to the estimate as the “25% Rule.” The other drivers who testified did not posit—or reject—any particular percentage, but agreed that Turtle Bayou was used for overflow when Highway 90 could not receive waste.

Able to roughly quantify a link between the waste intended for Highway 90 and the waste actually disposed of at Turtle Bayou, the court set about calculating the two remaining Occidental waste volume values based on documentary evidence of disposal at Highway 90. To calculate the intermediate value, the district court looked to the “Smythe Reports,” which Occidental had created in 1987 and which detail the amounts of waste Occidental shipped offsite for disposal at Highway 90. For the relevant time period, they indicate French Limited hauled 297,400 gallons of Occidental waste bound for Highway 90. Following the 25% Rule, the district court divided this figure by four to arrive at an intermediate estimate of 74,350 gallons.

In calculating Occidental’s maximum possible responsibility, the court looked to a ledger that French Limited had used to track hauls for each of its customers. The “French Ledger” provides details such as customer name, disposal fee, and intended disposal destination. After some extrapolation, the court found the French Ledger reflected 508,704 gallons of Occidental waste meant for disposal at Highway 90. Again, based on the 25% Rule, the court determined that one-fourth of that waste—127,176 gallons—was actually disposed of at Turtle Bayou.

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As discussed below, Dr. Newell used the court's three input values to calculate the volume of Occidental waste disposed of at Turtle Bayou. Looking to that calculation, the district court assigned 15.96% of El Paso's response costs to Occidental. Although both Occidental and El Paso contest this allocation, neither denies liability altogether. All other litigants, including Lyondell, are no longer parties to this appeal.

II

We begin with Occidental's challenge to Dr. Newell's expert testimony, specifically his use of the Monte Carlo statistical methodology to calculate the volume of Occidental's waste dumped at Turtle Bayou.²⁰ Occidental tepidly contends the methodology fails *Daubert*.²¹ We review a district court's admission of an expert's testimony for abuse of discretion.²²

Monte Carlo measures the probability of various outcomes, within the bounds of input variables; to calculate Occidental's waste volume, for example, Dr. Newell used the district court's three volume estimates as inputs. Instead

²⁰ On this point, Occidental relies on the briefs of Lubrizol Corporation, a former litigant.

²¹ *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579 (1993).

²² *Pipitone v. Biomatrix, Inc.*, 288 F.3d 239, 243 (5th Cir. 2002). El Paso contends that Occidental did not preserve this *Daubert* objection and that plain error review should thus apply. Although El Paso points to one objection that did not address the Monte Carlo method, Occidental made another—an oral objection to Dr. Newell's reports “because they fail to meet the standards of federal rule of evidence 702 and the standards announced by *Daubert*.” Though this is not specifically addressed to Dr. Newell's use of the Monte Carlo method, Lubrizol included arguments related to this methodology in its Proposed Findings of Fact and Conclusions of Law. This gave the district court an opportunity to rule on the contention. *See Benefit Recovery, Inc. v. Donelon*, 521 F.3d 325, 329 (5th Cir. 2008).

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of simply averaging the input values, Monte Carlo analysis uses randomly-generated data points to increase accuracy, and then looks to the results that those data points generate. The methodology is particularly useful when reaching an exact numerical result is impossible or infeasible and the data provide a known range—a minimum and a maximum, for example—but leave the exact answer uncertain. Seventy years after its discovery by physicists involved with nuclear weapons research, Monte Carlo analysis is now at home not only in the physical sciences but in a wide variety of fields including, for instance, the world of high finance.

Occidental's *Daubert* challenge relies on five arguments: that the Monte Carlo method used by Dr. Newell (1) has not been peer-reviewed as applied to CERCLA allocations; (2) is not generally accepted for use in CERCLA allocations; (3) was developed specifically for use in this litigation; (4) has not been tested as applied to CERCLA allocations and has a rate of error that cannot be evaluated; and (5) is not relevant because it is "equivocal."²³

In arguments one and two, Occidental concedes Monte Carlo analysis is reliable in general, but challenges its application to CERCLA cost allocation. This incorrectly assumes that the use of Monte Carlo analysis in this case differs meaningfully from any other Monte Carlo application; once we remove the irrelevant label of "waste volume," the court's chosen inputs serve as any other three numbers would. At any rate, the EPA itself has endorsed the use of Monte Carlo analysis in very similar applications—environmental risk assessments—explaining in a 1997 guidance document that "probabilistic

²³ Occidental also argues that the Monte Carlo analysis is unreliable because its three inputs are unreliable or inadmissible. We address these arguments below.

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analysis techniques [such] as Monte Carlo analysis, given adequate supporting data and credible assumptions, can be viable statistical tools for analyzing variability and uncertainty in risk assessments.”²⁴

Occidental’s third criticism is similarly meritless. It is true that Dr. Newell tailored Monte Carlo algorithms to meet the specific needs of this case, but the same effort is required of virtually all experts in environmental litigation. And, while made-for-litigation expert testimony is indeed cause for concern in some situations, Occidental gives us no reason to believe Dr. Newell’s testimony was biased, particularly since a court—and not a litigant—engaged him as an expert.

As for the testability and potential rate of error prongs of *Daubert*—the basis for Occidental’s fourth argument—the cited cases at most stand for the proposition that Monte Carlo analysis is unreliable when injected with faulty inputs, but nothing more.²⁵ Monte Carlo simulation is not inherently untestable: courts routinely admit statistical evidence,²⁶ and we can gauge reliability by examining input values and requiring transparency from testifying experts. Similarly, just because a Monte Carlo simulation produces a range of outcomes, rather than one single numerical value, does not mean it is speculative. If anything, Monte Carlo analysis provides greater certainty than the basic

²⁴ U.S. EPA, *Guiding Principles for Monte Carlo Analysis*, EPA/630/R-97/001 (1997).

²⁵ See *In re Application of Erie Blvd. Hydropower L.P. v. Town of Ephratah Bd. of Assessors*, No. 17-1-2000-0331, 2003 WL 21172636, at *4 (N.Y. Sup. Ct. Apr. 11, 2003) (“[A]ll you are doing in a Monte Carlo simulation is coming back to your own assumptions, so whatever went in comes out. Stated differently, if you make bad assumptions, you obtain bad output.”).

²⁶ See, e.g., *Turpin v. Merrell Dow Pharms.*, 959 F.2d 1349, 1353, 1357 (6th Cir. 1992).

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alternatives: using one of the three data points or using the arithmetic average of all three.

Nor is Dr. Newell's Monte Carlo analysis irrelevant because, as Occidental argues, it is "equivocal" or "statistical," or because it does not make any fact regarding allocation more likely than not.²⁷ The Monte Carlo analysis—though it produced a statistical range of likely outcomes and not one determinative answer—supports choosing one result over another, and certainly assisted the district court in its decisionmaking.

III

Occidental next objects to the district court's admission of the Smythe Reports, which the district court used to develop the "intermediate" estimate of Occidental's Turtle Bayou waste. Occidental asserts that the reports are settlement communications inadmissible under Federal Rule of Evidence 408. That rule excludes from admission certain evidence "offered to prove liability for, invalidity of, or amount of a claim that was disputed as to validity or amount," including "conduct or statements made in compromise negotiations regarding the claim."²⁸ These exclusionary powers are grounded in two rationales. First, the relevancy of settlement communications is thought to be suspect because they may have been an attempt to purchase peace rather than an admission of

²⁷ See FED. R. EVID. 401 (explaining that "relevant evidence" is "evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence").

²⁸F ED. R. EVID. 408.

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liability.²⁹ Second, and perhaps “most importantly,”³⁰ the rule’s exclusion of settlement evidence furthers public policy by promoting the voluntary settlement of disputes, which would be discouraged if evidence of compromise were later used in court.³¹ The need for voluntary settlement is especially critical in CERCLA litigation, with the statute’s emphasis—and dependency—on the willingness of potentially liable parties to negotiate with the government and with each other.³²

We review evidentiary challenges for abuse of discretion.³³ As the party objecting to the admission of such a communication, Occidental has the “burden of proving the preliminary facts required to show the inadmissibility of [the] compromise.”³⁴ An error in the admission of evidence is reversible when it affects a party’s substantial rights—that is, when it constitutes harmful error.³⁵

A

By its terms, Rule 408 protects only “conduct or statements made in

²⁹F ED. R. EVID. 408 advisory committee’s note para. 1.

³⁰M ICHAEL H. GRAHAM, HANDBOOK OF FEDERAL EVIDENCE § 408:1 (6th ed. 2009).

³¹F ED. R. EVID. 408 advisory committee’s note para. 1. *See also* GRAHAM, HANDBOOK OF FEDERAL EVIDENCE § 408:1 (describing the public policy rationale as “more consistently impressive” than the relevancy rationale).

³² *See Burlington N.*, 129 S. Ct. at 1870.

³³ *Chiasson v. Zapata Gulf Marine Corp.*, 988 F.2d 513, 515 (5th Cir. 1993).

³⁴ 3 CHARLES ALAN WRIGHT & KENNETH W. GRAHAM, JR., FEDERAL PRACTICE & PROCEDURE § 5315 (Supp. 2010).

³⁵ *See* FED. R. CIV. P. 61.

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compromise negotiations” regarding “a claim that was disputed as to validity or amount.”³⁶ This protection extends to legal conclusions, factual statements, internal memoranda, and the work of non-lawyers and lawyers alike so long as the communications were “intended to be part of . . . negotiations toward compromise.”³⁷ Litigation need not have commenced for Rule 408 to apply.³⁸

Occidental concedes the Smythe Reports were not part of negotiations directly arising out of the contamination at Turtle Bayou. They are instead the product of an earlier dispute over contamination at French Limited’s primary disposal location, Highway 90. Before discovering contamination at Turtle Bayou, the EPA had threatened to pursue CERCLA litigation related to Highway 90 in the mid-eighties, targeting several French Limited customers. Many of these customers—including El Paso and Occidental—formed the

³⁶F ED. R. EVID. 408.

³⁷ See *Ramada Dev. Co. v. Rauch*, 644 F.2d 1097, 1106–07 (5th Cir. 1981) (quoting 2 J. WEINSTEIN & M. BERGER, WEINSTEIN’S EVIDENCE 408(03), at 408-20 to -21 (1980)) (internal quotation marks omitted) (upholding the district court’s exclusion under Rule 408 of internal memoranda from an architect “made in the course of an effort to compromise”); see also *Affiliated Mfrs., Inc. v. Aluminum Co. of Am.*, 56 F.3d 521, 529–30 (3d Cir. 1995) (upholding the district court’s exclusion under Rule 408 of internal memoranda never disclosed to the opposing party). El Paso points out that the reports were not the work product of an attorney and nowhere indicated that they were settlement-related. El Paso, however, provides no caselaw support for this implicit assertion that Rule 408 protects only communications that are made in formal legal proceedings or that come from an attorney.

³⁸ See *Ramada*, 644 F.2d at 1106–07 (excluding under Rule 408 an analysis of construction defects that had been generated prior to any lawsuit); see also *Affiliated Mfrs., Inc.*, 56 F.3d at 526–28 (holding that Rule 408 applies “where an actual dispute or a difference of opinion exists, rather than when discussions crystallize to the point of threatened litigation”); *Mundy v. Household Fin. Corp.*, 885 F.2d 542, 546–47 (9th Cir. 1989) (excluding proof, in a discrimination suit, that defendant offered money for outplacement services three weeks after termination when plaintiff had received severance pay and other benefits, and hired counsel but not filed claims).

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“French Limited Task Group” in an attempt to avoid litigation, and to allocate and settle their potential liability. Occidental assigned an employee, Gary Smythe, as its representative to the group, but by the time Smythe joined the discussions, the task group had already decided on a higher allocation for Occidental than the company thought fair. In an effort to convince the other companies that Occidental should carry a lesser burden, Smythe, along with other Occidental employees and an outside consulting firm, created two reports purporting to account for all of Occidental’s waste dumped at Highway 90. These “Smythe Reports” attempted to “narrow th[e] gap” between what the task group had proposed and what Occidental believed to be a fairer assessment of its waste disposal at Highway 90.

The district court was right, then, in concluding that the reports were “made during settlement negotiations” as “an effort to resolve issues of relative responsibility for . . . Highway 90.” Although El Paso characterizes the reports as part of a “congenial effort by group members to fairly and cooperatively assess the contamination” unentitled to Rule 408 protection, we cannot agree. It is undisputed that the EPA threatened litigation against Occidental and other members of the task group. This threat raised not only the prospect of liability to the government but liability to other members of the task group because CERCLA imposes joint and several liability on each responsible party, and grants the right to sue confederates for contribution. The task force’s members made conflicting demands as a result: for its part, Occidental plainly offered the Smythe Reports in hopes of paying less than what the task force had already allocated to the company. The work of the task force was anything but business as usual and its discussions—including the Smythe Reports—went well beyond

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mere “business communications.”³⁹

B

Despite having concluded that the Smythe Reports were “made during settlement negotiations,” the district court admitted the reports into evidence. El Paso asserts this ruling was correct because Occidental created the Smythe Reports to settle legal issues unrelated to the subject of the present litigation. Quoting Wright and Graham’s treatise, El Paso contends “Rule 408 only bars the use of compromise evidence to prove the validity or invalidity of *the claim that was the subject of the compromise, not some other claim.*”⁴⁰ Because Occidental created the Smythe Reports in response to legal issues surrounding Highway 90, El Paso argues they are admissible in this action, which concerns contamination at Turtle Bayou.

El Paso’s argument hinges in part on the scope of the word “claim.” Courts vary widely in their understanding of the term, and thus in their understanding of when evidence is introduced to prove liability for, invalidity of, or the amount of *the claim* subject to compromise.⁴¹ Most do agree that “claim” does not mean

³⁹ See *Big O Tire Dealers, Inc. v. Goodyear Tire & Rubber Co.*, 561 F.2d 1365, 1368, 1372–73 (10th Cir. 1977) (determining that communications between the parties prior to litigation did not fall within Rule 408 as the calls were merely “business communications” because the discussions at issue “had not crystallized to the point of threatened litigation”).

⁴⁰ See 23 WRIGHT & GRAHAM, FEDERAL PRACTICE & PROCEDURE § 5314 (Supp. 2010); accord *Armstrong v. HRB Royalty, Inc.*, 392 F. Supp. 2d 1302, 1304 (S.D. Ala. 2005) (“By its terms, Rule 408 precludes the admission of evidence concerning an offer to compromise ‘a claim’ for the purpose of proving (or disproving) the fact or amount of ‘the claim’. . . . [t]he definite article ‘the’ limits ‘the claim’ as to which evidence may not be admitted to the claim previously referenced, i.e., the claim which was the subject of a settlement offer.”).

⁴¹ See FED. R. EVID. 408.

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“legal claim” and that, as a result, “[t]he dispute being settled need not be the one being tried in the case where the settlement is being offered in order for Rule 408 to bar its admission.”⁴²

Weinstein’s Evidence would nonetheless require that these different disputes arise out of the “same transaction” in order to trigger Rule 408.⁴³ Caselaw, too, can be organized around a loose “transactional” test. Four circuits—including this one—have applied Rule 408 to distinct legal claims arising out of a common event.⁴⁴ Other circuits have gone further, applying the rule to distinct legal claims arising, for example, out of the same failed business

⁴²W RIGHT & GRAHAM, FEDERAL PRACTICE & PROCEDURE § 5306 (Supp. 2010) (citing *Tucker v. Westlake*, 523 S.E.2d 139, 143 (N.C. Ct. App. 1999)).

⁴³ JACK B. WEINSTEIN, MARGARET A. BERGER & JOSEPH M. McLAUGHLIN, 2 WEINSTEIN’S EVIDENCE ¶ 408[04], at 408-30 (1996). This is because “[s]ettlements have always been looked on with favor, and courts have deemed it against public policy to subject a person who has compromised a claim to the hazard of having a settlement proved in a subsequent lawsuit by another person asserting a cause of action arising out of the same transaction.” *Id.*

⁴⁴ *Branch v. Fid. & Cas. Co. of N.Y.*, 783 F.2d 1289, 1294 (5th Cir. 1986) (preventing the use of evidence from the plaintiff’s previous settlement with one defendant in subsequent litigation with a second defendant when both actions arose out of same accident); *Lampliter Dinner Theater, Inc. v. Liberty Mut. Ins. Co.*, 792 F.2d 1036, 1042 (11th Cir. 1986) (holding that plaintiff could not introduce evidence of third-party plaintiff’s settlement with insurance company defendant when both plaintiffs’ claims arose out of the same sale of alcohol to minors); *McInnis v. A.M.F., Inc.*, 765 F.2d 240, 248 (1st Cir. 1985) (holding inadmissible evidence of the plaintiff’s previous settlement with one defendant in an action against a second defendant when the suit arose out of the same accident); *McHann v. Firestone Tire & Rubber Co.*, 713 F.2d 161, 166 (5th Cir. 1983) (same); *United States v. Contra Costa County Water Dist.*, 678 F.2d 90, 92 (9th Cir. 1982) (barring evidence related to the government’s settlement with one defendant in its suit against a second defendant when both actions arose out of damage to the same canal system). In *Branch*, we explained that “[t]he spectre of a subsequent use to prejudice a separate and discrete claim is a disincentive which Rule 408 seeks to prevent.” 783 F.2d at 1294. Despite this sweeping language, our decision only considered Rule 408’s application to different “legal claims” arising out of the same accident.

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relationship,⁴⁵ to legal claims brought by seven different plaintiffs that arose during the same fifteenth-month uranium exploration project,⁴⁶ and to legal claims brought by the government against two different taxpayers, even though the claims did not stem from the same factual nexus.⁴⁷ On the other hand, settlement evidence is not inadmissible merely because it relates to circumstances that are “similar” to those being litigated.⁴⁸

The Seventh Circuit eschews any strict “transaction” test, but looks to “the spirit and purpose of the rule and decide[s] whether the need for the settlement evidence outweighs the potentially chilling effect on future settlement negotiations.”⁴⁹ That balance is said to more likely “tip in favor of admitting

⁴⁵ *Fiberglass Insulators, Inc. v. Dupuy*, 856 F.2d 652, 655 (4th Cir. 1988) (barring evidence from the settlement of previous legal claims in subsequent litigation when each dispute arose out of the same failed business relationship).

⁴⁶ *Bradbury v. Phillips Petroleum Co.*, 815 F.2d 1356, 1363 (10th Cir. 1987) (rejecting, in dicta, evidence of seven prior claims that arose during the same uranium exploration project over the course of fifteen months because the “claims are related inasmuch as they arose in the course of the same large scale uranium exploration project operated by [the contractor], and because they are similar enough to the claim sued upon in this case to be relevant”).

⁴⁷ *Hudspeth v. Comm’r*, 914 F.2d 1207, 1213 & n.8 (9th Cir. 1990); see also *Williams v. Fermenta Animal Health Co.*, 984 F.2d 261, 264 (8th Cir. 1993) (excluding, under Rule 408, evidence regarding the settlement of a prior, unrelated discrimination lawsuit against the defendant’s predecessor corporation).

⁴⁸ Cf. *Broadcort Capital Corp. v. Summa Med. Corp.*, 972 F.2d 1183, 1194 (10th Cir. 1992) (stating in dicta that Rule 408 did not bar evidence of a previous settlement of a dispute related to a prior and distinct transaction involving the defendant but not the plaintiff); *Dallis v. Aetna Life Ins. Co.*, 768 F.2d 1303, 1306–07 (11th Cir. 1985); *Armstrong*, 392 F. Supp. 2d at 1308 (quoting *id.*);

⁴⁹ *Zurich Am. Ins. Co. v. Watts Indus., Inc.*, 417 F.3d 682, 689 (7th Cir. 2005); see also *Bankcard Am., Inc. v. Universal Bancard Sys., Inc.*, 203 F.3d 477, 484 (7th Cir. 2000) (“The need for Universal to explain it thought a settlement had been reached allowing it to roll over accounts—without allowing any details about the settlement talks or even use of the word

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evidence when the settlement communications at issue arise out of a dispute distinct from the one for which the evidence is being offered.”⁵⁰ Wright and Graham would take a similar approach:

[I]t seems preferable to make the meaning of “claim” turn on whether the result of the interpretation is likely to discourage parties from entering into compromise negotiations and whether the exclusion of the evidence of compromise would be fair in the case before the court.⁵¹

We too decline to adopt any rigid definition of “claim.” Our application of Rule 408 has been and remains fact-specific, and tethered to the rationales underlying the rule. And here, we have no trouble concluding the Smythe Reports were created for use in negotiations regarding the “claim” now being litigated. Though separated by time and location, the disputes associated with the Highway 90 and Turtle Bay sites arise out of the same events: the repeated dumping of hazardous waste intended for Highway 90. The disputes involve the same relevant parties, the same waste-generating facilities, the same basic time frame, the same waste hauler, and the same intended disposal site. More to the point, it involves the same primary liability question: What chemicals did each facility ship offsite and in what quantity? And because waste disposal at both sites is inextricably linked, the scope of a party’s liability for the Highway 90 Site bears directly on the extent of its liability for Turtle Bayou. The Highway 90 negotiations did not involve circumstances that were merely “similar” to the

‘settlement’—outweighed any potential for discouraging future settlements and did nothing to undermine the purpose and spirit of Rule 408.”).

⁵⁰ *Zurich*, 417 F.3d at 689.

⁵² 3 WRIGHT & GRAHAM, FEDERAL PRACTICE & PROCEDURE § 5306 (Supp. 2010).

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current dispute over Turtle Bayou.⁵² Even El Paso's counsel prudently conceded at oral argument that liability for one site is "germane" to liability for the other.

Even assuming the disputes over Highway 90 and Turtle Bayou represent two distinct "claims" for purposes of Rule 408, the Smythe Reports are only relevant insofar as they enable El Paso to prove liability for and the amount of contamination at Highway 90.⁵³ Only after resolving the question of liability for this antecedent "first claim" could El Paso make its case for costs arising out of contamination at Turtle Bayou—i.e., through the court's estimate that 25% of waste intended for Highway 90 was disposed of at Turtle Bayou.

Viewed through either lense, the offering of settlement evidence arising out of a shared factual nexus and bearing directly on present issues of liability between many of the same parties falls within Rule 408's prohibition. Effective dispute resolution requires frank and full discussion of relevant evidence. Making the content of such a discussion available for use in related litigation

⁵² Cf. *Dallis*, 768 F.2d 1303, 1306–07 & n.2 (11th Cir. 1985) ("We do not reach the question of whether Rule 408 bars evidence of a settlement between one of the parties and a third party when such settlement involves similar circumstances to, but does not arise out of, the transaction with which the litigation is concerned.").

⁵³ See *Uforma/Shelby Bus. Forms, Inc. v. NLRB*, 111 F.3d 1284, 1294 (6th Cir. 1997) (holding that "Rule 408 does not exclude evidence of alleged threats to retaliate for protected activity when the statements occurred during negotiations focused on the protected activity and the evidence serves to prove liability either for making, or later acting upon, the threats" because the evidence was not introduced in order to prove the validity of the grievance which served as the subject of the negotiations); *Vulcan Hart Corp. v. NLRB*, 718 F.2d 269, 277 (8th Cir. 1983) (Rule 408 did not bar evidence of demand during negotiations to settle grievance that employee resign his union office when general counsel did not seek to prove validity of grievance). But see *Towerridge, Inc. v. T.A.O., Inc.*, 111 F.3d 758, 770 (10th Cir. 1997) (holding that Rule 408 did not bar evidence of defendants' previous settlement with a third-party regarding a separate action arising out of the same facts because the evidence was offered "to show [the plaintiff] was not at fault for any delay and to show [the defendants] acted in bad faith").

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would invite the very situation that Rule 408 is designed to avoid, and worse, in CERCLA litigation, reduce the likelihood that responsible parties would volunteer to right their environmental wrongs. CERCLA only works when that likelihood is high—after all, the entire statutory regime is predicated on the fact that the government has limited resources to find potential polluters, to dictate remedial measures to those polluters it does find, and to pay for those it does not. CERCLA itself protects parties who enter into consent decrees with the government, stating that participation in that process “shall not be considered an admission of liability for any purpose, and the fact of such participation shall not be admissible in any judicial or administrative proceeding.”⁵⁴

Determining when one CERCLA claim ends and another begins is particularly difficult, too, because environmental damage does not always respect lines drawn on a settlement map. Efforts to detect hazardous substances can prove inconclusive and the substances, once found, often remain a moving target. The signing of a settlement will not, as a result, always end the chapter for potentially responsible parties, as this case amply demonstrates.

We are mindful that Rule 408 should not exclude more than required to effectuate its goals, which, after all, run counter to the overarching policy favoring the admission of all relevant evidence.⁵⁵ But we have no difficulty concluding that exclusion of the Smythe Reports fits comfortably within the rule’s limitations. The tension between Rule 408 and the policy favoring the

⁵⁴ 42 U.S.C. § 9622(d)(1)(B); see *N.J. Turnpike Auth. v. PPG Indus., Inc.*, 16 F. Supp. 2d 460, 473 (D.N.J. 1998) (recognizing parallels between this provision of CERCLA and Rule 408).

⁵⁵ See FED. R. EVID. 402.

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admission of relevant evidence is mitigated in the present case: from the general public's standpoint, the need for evidence in a CERCLA contribution case is simply less critical than in a situation in which liability is contested. Here, we know that El Paso and Occidental are responsible for remediating Turtle Bayou; what remains to be determined is how much each private entity will pay.

The district court's admission of the Smythe Reports, then, was an abuse of discretion. And this error was harmful. The Smythe Reports support at least a few of the district court's conclusions, most notably its "intermediate" calculation of Occidental's waste volume. El Paso urges that Dr. Newell was entitled to rely on the report as an expert,⁵⁶ but fails to explain how an expert's use of settlement evidence would not effectively vitiate Rule 408's protections altogether. Even if an expert could use evidence otherwise inadmissible under the rule, it was the district court that calculated the intermediate volume input, not Dr. Newell. Rather, Dr. Newell relied on all three volume inputs at the court's direction. Given that the district court's intermediate waste estimate for Occidental is now without key evidentiary support, we decline to simply average the remaining minimum and maximum values and leave, on remand, the reallocation of costs to the district court in the first instance.⁵⁷

⁵⁶ See FED. R. EVID. 703 (explaining that an expert is not barred from using inadmissible evidence to form his opinion).

⁵⁷ Critically, our holding does not prevent the admission of the raw data and information used to generate the Smythe Reports, if that data and information is otherwise admissible. See FED. R. EVID. 408 advisory committee's note para. 24 ("[T]he Rule cannot be read to protect pre-existing information simply because it was presented to the adversary in compromise negotiations."). Rule 408's exclusionary reach is limited to documents or statements, like the Smythe Reports, that "would not have existed but for the negotiations" and to situations where "the negotiations are not being used as a device to thwart discovery by making existing documents unreachable." *Ramada*, 644 F.2d at 1107. In much the same

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IV

Occidental also faults the district court's choice of equitable factors used in allocating response costs for Turtle Bayou among the liable parties. In making such a tally, a court may use "such equitable factors as the court determines are appropriate."⁵⁸ Here, the district court chose to base its allocation on the total volume of waste produced at each facility, weighting those volumes according to chemical composition. Occidental essentially argues that instead of calculating waste by facility, the court should have aggregated total waste by company. Occidental would have fared better had the court done so, particularly when compared to Lyondell.

Occidental fails to demonstrate that the district court's result is unfair. On the contrary, the district court considered the total volumes of waste streams for each Lyondell facility, just as it considered the total volumes for the Occidental facility. By uniformly applying the same facility-level approach, the court employed the most specific evidence available for all parties; in an

way that turning documents over to one's lawyer does not automatically cloak those documents in attorney-client privilege, a party cannot protect otherwise admissible information just by synthesizing it in a report used to settle a dispute. *See, e.g., United States v. Robinson*, 121 F.3d 971, 975 (5th Cir. 1997) ("It goes without saying that documents do not become cloaked with the lawyer-client privilege merely by the fact of their being passed from client to lawyer. . . . In the case of pre-existing documents, if they 'could have been obtained by court process from the client when he was in possession[, they] may also be obtained from the attorney by similar process following transfer by the client in order to obtain more informed legal advice.'" (quoting *Fisher v. United States*, 425 U.S. 391, 403 (1976)) (alteration in *Robinson*)).

⁵⁸ 42 U.S.C. § 9613(f); *see Am. Cyanamid Co. v. Capuano*, 381 F.3d 6, 19 (1st Cir. 2004); *United States v. Consolidation Coal Co.*, 345 F.3d 409, 413–14 (6th Cir. 2003) ("[A] court may consider any factors appropriate to balance the equities in the totality of the circumstances."); *United States v. Colo. & E. R.R.*, 50 F.3d 1530, 1536 & n.5 (10th Cir. 1995).

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equitable calculus that cannot be error.⁵⁹

V

Occidental also sees error in a handful of the district court's factual findings, which we review for clear error.⁶⁰ "A finding of fact is not clearly erroneous 'if it is plausible in the light of the record read as a whole.'"⁶¹ CERCLA contemplates flexibility so that "[t]he parties actually performing the cleanup can look for reimbursement from other potentially responsible parties without fear that their contribution actions will be bogged down by the impossibility of making meticulous factual determinations as to the causal contribution of each party."⁶²

A

Occidental quarrels with the maximum waste volume value used in Dr. Newell's Monte Carlo analysis—a value the district court derived from the French Ledger. Although the ledger did not list any offsite disposal charges for Occidental in 1969, the court concluded that Occidental had trucked away

⁵⁹ Occidental also claims the district court should have calculated volume by individual waste stream. The court found the evidence insufficient to do so. Although it may have been possible to delineate Occidental's waste by chemical components because the Smythe Reports provide some waste chemistry data, that capability is erased without those reports.

⁶⁰ *Elementis Chromium L.P. v. Coastal States Petroleum Co.*, 450 F.3d 607, 613 (5th Cir. 2006) (reviewing a district court's allocation of response costs for clear error under CERCLA).

⁶¹ *Id.* (quoting *Baker Hughes Oilfield Operations, Inc. v. Cage (In re Ramba)*, 416 F.3d 394, 402 (5th Cir. 2005)).

⁶² *United States v. R.W. Meyer, Inc.*, 932 F.2d 568, 573–74 (6th Cir. 1991).

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hazardous waste during that year, citing other evidence including the now-inadmissible Smythe Reports. With that conclusion in hand, the court determined Occidental's average monthly disposal charges for 1970 using the French Ledger. It then assumed this monthly average held true for July 1969 through December 1969, an assumption that increased Occidental's maximum estimated responsibility by about 60%.

Having determined that the Smythe Reports were admitted in error, we leave it to the district court on remand to decide whether the record without the reports remains sufficient to uphold this extrapolation.

B

Occidental also contests the district court's finding that one-fourth of the waste intended for the Highway 90 Site actually ended up at Turtle Bayou. Occidental says this 25% Rule is speculative as to Occidental because it is supported by only two of French Limited's forty drivers—one who recalled no loads from Occidental and one who remembered only two.

We disagree. The district court found the drivers' testimony credible and no credible witness claimed otherwise. The district court did not treat the "rule" as a "definitive measure of the proportion of French [Limited] hauls that were dumped at the Turtle Bayou site," but considered it "an appropriate fallback option where better evidence of disposal rates is not available." Left with significant evidence of disposal at Highway 90 and credible evidence of a link between that disposal and the waste at Turtle Bayou, the district court did not clearly err in applying the "rule" absent countervailing evidence.

Even if the court's factual finding was not in error, Occidental contends

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the court applied the 25% Rule unfairly. It notes that the French Ledger listed several companies who are not parties to this lawsuit and argues the district court should have used the rule to assign responsibility to these non-parties as well—decreasing the relative responsibility of Occidental. We again disagree. The district court concluded it could not impose liability on a French Limited customer—and therefore could not assign a waste volume to that customer—without an independent link between that customer and Turtle Bayou.⁶³ Occidental’s liability, not contested here, was established by evidence apart from blind application of the 25% Rule; for one, Kimmons testimony specifically links Occidental waste to disposal at Turtle Bayou. The court applied the 25% Rule to *all* French Limited customers found liable during the first phase of trial, treating each liable party fairly. No such evidence connected the non-parties.

C

Although Occidental concedes that it is, along with El Paso and others, liable for past costs incurred by the United States at Turtle Bayou, it disclaims responsibility for El Paso’s cleanup of the El Paso Remediation Areas. Occidental argues that there is insufficient evidence that French Limited dumped Occidental waste in those particular locations. Occidental points to the testimony of Kimmons, the lone truck driver who attested to delivering Occidental waste to Turtle Bayou. Kimmons testified that he dumped Occidental waste at the Main Waste pit, which falls within the Lyondell

⁶³ Occidental itself argued that mere customer status was not enough to establish liability.

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Remediation Areas, but made no mention of dumping waste specifically at the El Paso Remediation Areas. The district court, however, found that “Kimmons . . . was not the only French driver to handle Occidental’s wastes” and that French Limited plainly had trucked significant amounts of Occidental waste bound for Highway 90. “Given the scope of hauling,” the court concluded “it is probable that at least one load of . . . Occidental’s waste[] was disposed of in an area remediated by El Paso.”

These findings are consistent with the district court’s treatment of the other parties. The court held that “the evidence is not sufficiently conclusive for the court to isolate a particular company’s waste to a specific portion of [Turtle Bayou].” No expert could tie the waste of any company to distinct geographic areas within Turtle Bayou, either. It was enough that the district court could determine that some of Occidental’s waste intended for Highway 90 was dumped somewhere at Turtle Bayou. Occidental does not dispute this core liability finding. Our review of the record as a whole indicates that the district court’s findings are plausible and evince no clear error.

VI

The district court assigned more than half of El Paso’s response costs to Lyondell, but that share was “uncollectible”—meaning El Paso could not collect any further sums from the company. From the district court’s point of view, the share was only uncollectible because El Paso had chosen to settle with Lyondell. On that basis, the court meted out responsibility for Lyondell’s share to El Paso instead of distributing Lyondell’s share proportionally among all liable parties:

If El Paso believes that the settlement agreement does not adequately reflect its proportionate share of liability vis-a-vis

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[Lyondell], then El Paso should have refrained from entering into the agreement and taken its chances at trial.⁶⁴

In its cross-appeal, El Paso contends the court erred in its assessment because, at the time of settlement, Lyondell had already resolved all of its liability regarding Turtle Bayou. So, as far as Lyondell was concerned, its consent decree with the government granted protection from El Paso's contribution claim. According to El Paso, then, its settlement with Lyondell could only resolve El Paso's liability to Lyondell—not liability the other way around—because the earlier consent decree barred El Paso from recovering against Lyondell altogether. El Paso urges this created an uncollectible “orphan” share that should have been distributed proportionally among all liable parties.

As defined by some courts, an “orphan share” is the liability attributable to a party who is insolvent, cannot be located, or cannot be identified.⁶⁵ Under this doctrine, a court may choose to allocate a proportional fraction of an orphan share to all available, solvent, and responsible parties. The doctrine is an equitable one, vesting courts with the discretion both to determine whether a

⁶⁴ In its pleading, El Paso defined the term “Plaintiffs” as the “Lyondell Plaintiffs and the Government, collectively.” It then pleaded its claims against Lyondell:

El Paso denies that the Lyondell Plaintiffs are entitled to judgment. If El Paso is judged liable to the Plaintiffs, then El Paso claims that the Lyondell Plaintiffs are liable for contribution pursuant to Section 113(f) of CERCLA, 42 U.S.C. § 9613, federal common law and state law for any relief entered against El Paso in excess of the equitable, proportionate share of El Paso's liability.

⁶⁵ See, e.g., *Action Mfg. Co., Inc. v. Simon Wrecking Co.*, 428 F. Supp. 2d 288, 328 (E.D. Pa. 2006) (noting that all of the federal courts of appeals to consider the issue “have concluded or assumed that the orphan shares should be allocated equitably among plaintiff and defendant [potentially responsible parties]”).

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share is an orphan, and whether to allocate that orphan share to all available responsible parties.⁶⁶ Lyondell's share is not a traditional "orphan," but we assume without deciding that a solvent and identified party's share of CERCLA costs can qualify as an "orphan share" and thus that Lyondell percentage of responsibility was theoretically distributable among other liable parties.⁶⁷

As "[a] person who has resolved its liability to the United States," Lyondell was not liable for any claims for contribution brought by El Paso for "matters addressed" in its 1998 consent decree.⁶⁸ By the decree's terms, those "matters addressed" in Lyondell's settlement included the "Site" and matters "related . . . to the Site." The "Site" encompassed "only that property which includes the areal extent of contamination and all suitable property in very close proximity to the contamination necessary for the implementation of the [Lyondell remediation plan]." The decree specifically "designated" this property as "the West Road Area, the Main Waste Area, the Office Trailer Area, the Easement Area, the Bayou Disposal Area, and Country Road 126 (formerly Frontier Park Road)."

The decree's text plainly does not incorporate all of Turtle Bayou—it lists

⁶⁶ *Id.*

⁶⁷ Occidental argues that a party, like Lyondell, who settles its CERCLA liability with the government has been held accountable and its share cannot qualify as an orphan to be distributed among other responsible parties. In support, it reminds that CERCLA provides that a "settlement reduces the potential liability of the others by the amount of the settlement"—it is not distributed to other responsible parties, in the form of an "orphan share" or otherwise. 42 U.S.C. § 9613(f)(2). We see Occidental's point, but note that if a party settles for less than its fair share of liability as later determined by a court, that remaining liability will arguably be unassigned. We decide El Paso's cross-appeal on other grounds so need not answer the question here.

⁶⁸ *Id.*

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discrete areas. Of those six areas, four—West Road, Main Waste, Office Trailer, and Easement—are within the Lyondell Remediation Areas. The fifth, the Bayou Disposal Area, is an El Paso Remediation Area. That potentially leaves one remediation plot—the Far West Road Area—outside Lyondell’s contribution protection and subject to legal action by El Paso. El Paso claims the decree’s inclusion of “Country Road 126” was a reference to the Far West Road Area, or, at the very least, that its cleanup work in the Far West Road Area is “related to” Country Road 126 because that work “centered directly under the road itself.”

At most, these arguments demonstrate that the scope of Lyondell’s contribution protection was a matter subject to adversarial dispute and judicial determination. For one, the Far West Road Area was not known to be contaminated at all when Lyondell settled its liability for the Lyondell Remediation Areas. Nor is the area in “very close proximity” to known contamination in 1998—it is more than a quarter-mile away from the closest remediation area at the time, the West Road Area. And while it is true that the tract of land known as Far West Road Area was also referred to as the “Country Road 126 West Area,” the consent decree plainly refers to the *road* that traverses Turtle Bayou from east to west, going well beyond any one tract.

Rather than litigate these questions, El Paso dropped its contribution action against Lyondell under CERCLA section 113 by entering into a settlement. Among other terms, the settlement provided that El Paso would receive all of Occidental’s eventual contribution, that the first \$3 million received from other settlements would go to Lyondell, and that most other proceeds would be shared so that Lyondell received 67% and El Paso received 33%. Nothing precluded El Paso from negotiating a higher percentage if it believed Lyondell’s

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share of costs to be greater. El Paso also agreed that it would not oppose an interpretation of Lyondell’s 1998 consent decree that would absolve it of any future liability at Turtle Bayou altogether—indicating that both parties considered Lyondell’s contribution protection a matter amenable to genuine dispute. This conclusion is confirmed by El Paso’s earlier suggestion to the district court that it define “orphan share” as “those shares of the waste responsibility which are attributable to [potentially responsible parties] who either are insolvent or cannot be located or identified”—a definition that does not, on its face, include Lyondell’s uncollectible responsibility.⁶⁹

VII

In sum, because admission of the Smythe Reports was harmful error, we **AFFIRM** in part, **REVERSE** in part, and **REMAND** for further proceedings consistent with this opinion.

⁶⁹ Even the broadest possible contribution protection would have only prevented the district court from affirmatively ordering Lyondell to pay contribution; the district court could still have barred Lyondell from recovering any contribution from El Paso in excess of El Paso’s equitable share.