

United States Court of Appeals For the First Circuit

No. 03-2143

AMERICAN CYANAMID COMPANY,
Plaintiff,

ROHM AND HAAS COMPANY,
Plaintiff, Appellee,

v.

DANIEL J. CAPUANO, JR.; JACK CAPUANO;
UNITED SANITATION, INC.,
Defendants, Appellants,

A. CAPUANO BROS., INC.; CAPUANO ENTERPRISES, INC.,
Defendants.

APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF RHODE ISLAND
[Hon. Mary M. Lisi, U.S. District Judge]

Before

Torrueella and Lipez, Circuit Judges,
and Saris,* District Judge.

Mortimer C. Newton, was on brief, for appellants.
John M. Armstrong, with whom Schnader Harrison Segal & Lewis
LLP was on brief, for appellee.

August 18, 2004

* Of the District of Massachusetts, sitting by designation.

TORRUELLA, Circuit Judge. In 1977, Warren Picillo, Sr. and his wife agreed to allow part of their pig farm in Coventry, Rhode Island ("Picillo site") to be used as a disposal site for drummed and bulk waste. Later that year, after thousands of barrels of hazardous waste replaced what pigs at one time called home, a monstrous explosion ripped through the Picillo site. The towering flames, lasting several days, brought the waste site to the attention of the Rhode Island environmental authorities. Rhode Island investigators "discovered large trenches and pits filled with free-flowing, multi-colored, pungent liquid wastes." Violet v. Picillo, 648 F. Supp. 1283, 1286 (D.R.I. 1986). Recognizing the environmental disaster it had discovered, Rhode Island closed the pig farm and, with the federal government, began the cleanup process.

In a nutshell, this case involves an action under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") §§ 101-405, as amended by the Superfund Amendments and Reauthorization Act of 1986 ("SARA"), 42 U.S.C. §§ 9601-9675, brought by a company whose hazardous waste was deposited at the Picillo site against a group of people who were involved with the site.

I. Background

A. CERCLA

CERCLA is a statutory scheme that provides specific procedures for the remediation of a hazardous site. To understand this appeal, it is necessary to mention some of these procedures and define certain terms.

The remediation process at a hazardous site is called a response action. 42 U.S.C. § 9601(25). A response action involves removal actions, which "means the cleanup or removal of released hazardous substances from the environment," id. § 9601(23), and remedial actions, which "means those actions consistent with permanent remedy taken instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance into the environment," id. § 9601(24).

When the government performs a response action, it can bring "a cost recovery action under § 9607 . . . for the costs of the cleanup [against] a party found to be an owner or operator, past operator, transporter, or arranger." United States v. Davis, 261 F.3d 1, 28-29 (1st Cir. 2001). "A party found liable under § 9607 may in turn bring an action for contribution" against

potentially responsible parties ("PRPs")¹ under § 9613(f). Id. at 29.

B. The parties

Defendants-appellants, Daniel Capuano, Jr.; Jack Capuano; United Sanitation, Inc.; A. Capuano Brothers, Inc.; and Capuano Enterprises, Inc. (hereinafter referred to as "the Capuanos"), were in the business of hauling hazardous waste. Jack Capuano was the president and sole shareholder of Sanitary Landfill, Inc., a landfill operation located in Cranston, Rhode Island. Jack Capuano and Daniel Capuano jointly owned United Sanitation, Inc., a waste hauling company. Jack Capuano was the president of United Sanitation and Daniel was the vice-president. In 1977, the Capuanos reached an agreement with Warren Picillo to dump hazardous waste on his pig farm.

In 1977, plaintiff-appellee, Rohm & Haas Company ("R&H") operated research facilities in Spring House and Bristol, Pennsylvania, which generated hazardous waste. Forty-nine of the 10,000 drums of waste at Picillo were generated by R&H. O'Neil v. Picillo, 682 F. Supp. 706, 709, 720 (D.R.I. 1988).

These drums ended up at the Picillo site in a round-about way. R&H's Spring House facility contracted with Jonas Waste

¹ PRP's can include "present and past owners and operators of a contaminated site, transporters who selected the site, and generators of waste who arranged for disposal of their wastes at the site." Jeff Civins & Bane Phillippi, New Federal Brownfields Legislation: Who's Liable Now?, 65 Tex. B.J. 982, 983 (Dec. 2002).

Removal ("Jonas") to dispose of its waste. Jonas sent the waste to the Chemical Control Corporation, which later contracted with Chemical Waste Removal to dispose of the waste. Chemical Waste Removal disposed of the waste at the Picillo site. R&H's Bristol facility contracted with Scientific Chemical Processing ("SCP") to dispose of its waste. SCP later contracted with Daniel Capuano and United Sanitation to dispose of the waste at the Picillo site.

C. The soil cleanup

In 1983, Rhode Island brought an enforcement action under CERCLA § 107, 42 U.S.C. § 9607, for cleanup costs at the Picillo site. This initial action was brought against 35 defendants "who were either owner/operators of the site, parties who allegedly transported waste there, parties alleged to have arranged for their waste to be transported to the site, and parties alleged to have produced waste deposited at the site." O'Neil, 682 F. Supp. at 709.

Rhode Island settled with twenty of the defendants, including the Capuanos. The Capuanos agreed to pay \$500,000. Rhode Island went to trial against five of the remaining defendants, including R&H. After trial, the district court found R&H and two other companies jointly and severally liable for unreimbursed past response costs of \$991,937 and for "all future costs of removal or remedial action incurred by the state . . . includ[ing] any costs associated with the removal of contaminated

soil piles." Id. at 731. We affirmed the district court's holdings. O'Neil v. Picillo, 883 F.2d 176 (1st Cir. 1989).

The United States also sought reimbursement for its response costs associated with the soil cleanup at the Picillo site and settled with many parties, including the Capuanos. The Capuanos agreed to pay \$1,500,000. The settling parties received contribution protection as part of the settlement agreement. See 42 U.S.C. § 9613(f)(2) ("A person who has resolved its liability to the United States or a State in an administrative or judicially approved settlement shall not be liable for claims for contribution regarding matters addressed in the settlement."). In 1989, the United States filed a cost recovery action under § 9607 against R&H and another company, American Cyanamid. See United States v. American Cyanamid Co., 794 F. Supp. 61 (D.R.I. 1990). The district court entered a judgment against them for \$3,339,029 plus interest. United States v. American Cyanamid Co., 786 F. Supp. 152, 165 (D.R.I. 1992).

D. Groundwater cleanup

In 1987, the United States began developing a Remedial Investigation and Feasibility Study ("RI/FS") with respect to the groundwater at the Picillo site. By September 1993, the United States called for a groundwater cleanup. On March 30, 1994, the United States issued a "special notice letter" to twenty PRPs, including the Capuanos and R&H, demanding they implement a

groundwater remedy and reimburse the Environmental Protection Agency ("EPA") for the costs related to the RI/FS and enforcement costs. In response to the United States's letter, two groups of PRPs made settlement offers. The Capuanos joined neither group. R&H joined one of the groups making a settlement offer. As a result, R&H began incurring cleanup costs in late 1994. R&H was expelled from the settlement group, however, in March 1995 because it could not agree with the group regarding R&H's contribution. Without R&H, a group of PRPs settled with the United States and agreed to implement a groundwater remedy.

In 1998, R&H entered a consent decree with the United States to pay \$4,350,000 to compensate the United States for direct response costs related to groundwater cleanup, plus \$110,000 towards oversight costs, and \$69,000 towards natural resource damage. The consent decree was approved in October 1998.

E. R&H's contribution action

In April 1995, R&H instituted a § 9613(f)(1) contribution action in the United States District Court for the District of New Jersey to recover past and future response costs related to groundwater cleanup. The suit named 52 PRPs, including the Capuanos. In March 1999, the Capuanos moved to dismiss R&H's claims against them based on personal jurisdiction and venue grounds. The District Court of New Jersey concluded it lacked jurisdiction over the Capuanos. Thus, the District Court of New

Jersey severed the claims against the Capuanos and transferred them to the District Court of Rhode Island.

F. The proceedings below

In 2001, the Capuanos filed a motion for summary judgment, which was denied. In March 2003, the matter was tried before a district judge who found the Capuanos liable to R&H and entered judgment for \$2,651,838. In September 2003, the district court amended the judgment to include \$507,369 for prejudgment interest. The Capuanos appeal from this amended judgment and for the reasons stated below, we affirm.

For ease of discussion, this opinion is organized into three parts. Part One addresses the affirmative defenses raised by the Capuanos -- statute of limitations, res judicata, and contribution immunity. Part Two addresses issues relating to the trial. Part Three addresses issues relating to the judgment and the awarding of prejudgment interest.

II. Part One: Affirmative defenses

A. Statute of limitations

CERCLA mandates that:

No action for contribution for any response costs or damages may be commenced more than 3 years after --

(A) the date of judgment in any action under this Act for recovery of such costs or damages, or

(B) the date of an administrative order under section 122(g) [42 USCS § 9622(g)] (relating

to de minimis settlements) or 122(h) [42 USCS § 9622(h)] (relating to cost recovery settlements) or entry of a judicially approved settlement with respect to such costs or damages.

42 U.S.C. § 9613(g) (3) .

Section 9613(g) (3) lists four events that trigger the running of the statute of limitations: (1) the entry of a judgment; (2) a § 9622(g) de minimis settlement; (3) a § 9622(h) cost recovery settlement; and (4) a judicially approved settlement. The Capuanos contend that R&H's contribution action is time-barred because a judgment against R&H was entered on April 20, 1988, at which time R&H was adjudged jointly and severally liable for past and future costs of remediation at the Picillo site. See O'Neil, 682 F. Supp. at 730-31. If they are correct, any claims for contribution should have been brought by April 20, 1991, many years before this case was filed.

To support their argument, the Capuanos first contend that the plain language of § 9613(g) (3) sets the triggering date for starting the statute of limitations as the "date of judgment in any action under this Act." 42 U.S.C. § 9613(g) (3) (emphasis added). Since O'Neil was a "judgment" in an "action" under § 9607, the plain language of § 9613(g) (3) would suggest that the statute of limitations started in 1988. The Capuanos make this argument acknowledging that response costs relating to the groundwater remediation had not been identified or incurred at the time of the

O'Neil judgment. Nevertheless, citing United States v. Davis, 261 F.3d 1, 46 (1st Cir. 2001), the Capuanos argue that costs or damages need not be identified for a plaintiff in a CERCLA action to seek an allocation of future response costs.

The Capuanos also argue that an adjudged liable PRP who is permitted to seek contribution for response costs before its liability is established, and who can seek an allocation of future response costs once its liability is established, should not be able to split its contribution claims into several successive lawsuits as the cleanup continues and the PRP's costs become fixed. Splitting contribution suits results in inefficiencies and conflicting judgments, the antitheses of CERCLA's policy objectives.

The district court, rejecting the Capuanos' arguments, held that "whether a PRP can seek contribution ultimately depends on whether it incurs future costs. Until that occurs, regardless of whether liability has been assessed against a contribution defendant, there has been no expenditure or fixing of costs for which a PRP may seek contribution." We agree with the district court's holding and reject the Capuanos' arguments for similar reasons.

We review de novo questions regarding the proper interpretation of a statute. See United Techs. Corp. v. Browning-Ferris Indus., Inc., 33 F.3d 96, 98 (1st Cir. 1994). "It is

apodictic that our first recourse must be to the statute's text and structure." Id. at 99. The main issue on appeal is whether the 1988 O'Neil judgment qualifies, for purposes of the limitations period in this action, as a "judgment in any action under this Act for recovery of such costs or damages." 42 U.S.C. § 9613(g) (3). It is undisputed that O'Neil was a judgment in an action under CERCLA. The controversy surrounds whether the O'Neil judgment was for "recovery of such costs or damages." We believe it was not.

1. The declaratory judgment in O'Neil

The district court, in O'Neil, issued a declaratory judgment holding R&H "jointly and severally liable for all future costs of removal or remedial action incurred by the state relative to the Picillo site." This declaratory judgment did not trigger the statute of limitations for the groundwater cleanup because being held jointly and severally liable for all future costs of removal or remedial action is not a judgment for the recovery of such costs.

Reaching this conclusion requires us to dissect 42 U.S.C. § 9613. Section 9613(g) (2) provides that, in an initial action for the recovery of costs, "the court shall enter a declaratory judgment on liability for response costs or damages that will be binding on any subsequent action or actions to recover further response costs or damages." 42 U.S.C. § 9613(g) (2) (B) (emphasis added). The O'Neil judgment was an initial action for the recovery

of costs associated only with the soil remediation. The district court also entered a declaratory judgment by holding that "the defendants are jointly and severally liable for all future costs of removal or remedial action incurred by the state relative to the Picillo site." O'Neil, 682 F. Supp. at 730. Although the district court entered a judgment on liability for future response costs, the district court did not enter a judgment for the recovery of such costs. The declaratory judgment is binding on any subsequent actions to recover response costs or damages, but it is not itself a judgment for the recovery of such costs or damages.

2. The judgment for past soil remediation response costs

The Capuanos also contend that the O'Neil judgment triggered the running of the statute of limitations because it was a judgment for the recovery of response costs. In O'Neil, R&H was held "jointly and severally liable for past response costs totaling \$991,937.30" for the soil remediation. Thus, the Capuanos argue, R&H had three years from the date of the O'Neil judgment to bring a contribution action not only for costs relating to the soil remediation, but also for any response costs or damages that could arise in the future.

We disagree and, once again, begin our inquiry by examining the language of the statute. When interpreting a statute, "courts must strive to give effect to each subsection contained in a statute, indeed, to give effect to each word and

phrase." Browning-Ferris, 33 F.3d at 101. Section 9613(g)(3) states that "[n]o action for contribution for any response costs or damages may be commenced more than 3 years after -- (a) the date of judgment in any action . . . for recovery of such costs or damages." 42 U.S.C. 9613(g)(3) (emphasis added). There are two plausible interpretations of subparagraph (a). Under one interpretation, the term "such costs or damages" refers to any response costs. Under a second interpretation, the term "such costs or damages" refers to the costs or damages contained in the "judgment" mentioned in subparagraph (a).

Several factors favor the latter interpretation. First, other subsections of § 9613(g)(3) contain the word "such" and use it to limit and identify a word within the same sentence. For example, § 9613 (g)(4) states that "[n]o action based on rights subrogated pursuant to this section by reason of payment of a claim may be commenced . . . more than 3 years after the date of payment of such claim." 42 U.S.C. § 9613(g)(4) (emphasis added). Similarly, § 9613(g)(5) states that "where a payment pursuant to an indemnification agreement with a response action contractor is made . . . an action . . . for recovery of such indemnification payment from a potentially responsible party may be brought at any time before the expiration of 3 years from the date on which such payment is made." 42 U.S.C. § 9613(g)(5) (emphasis added). In both subsections, the word "such" is used to identify a particular

claim or payment. Similarly, we find that "such costs" in § 9613 (g) (3) refers to the judgment mentioned earlier in the sentence and identifies a particular claim or payment.²

Our interpretation of other subsections of § 9613 further supports the interpretation that "such costs" refers to costs identified in the judgment. Section 9613(g) (2) requires a court to enter a declaratory judgment on liability and then provides that subsequent actions for future response costs "may be maintained at any time during the response action, but must be commenced no later than 3 years after the date of completion of all response action." See 42 U.S.C. § 9613(g) (2) (B). Section 9613(g) (2), therefore, allows for the cleanup and the payment for that cleanup to occur in phases. When a PRP is forced to pay more than its share of that cleanup, it turns to § 9613(f), which allows a PRP to "seek contribution from any other person who is liable or potentially liable." 42 U.S.C. § 9613(f) (1). We have determined that § 9613 (g) (2)'s declaratory provision applies to § 9613(f) (1), allowing a PRP to obtain a declaratory judgment in a contribution action. See Davis, 261 F.3d at 45-46. After obtaining such a declaratory judgment, a PRP is able to seek contribution from other PRPs in

² The comparison to the other subsections is not perfect. Indeed, in §§ 9613(g) (4)&(5) the terms "such claims" and "such indemnification" refers back to the words "claim" or "indemnification" used earlier in the sentence, whereas in § 9613 (g) (3), we read the term "such costs" to refer back to the costs contained in a "judgment."

phases as it incurs costs beyond its pro rata share. By interpreting "such costs" to refer to those costs contained in a judgment, a PRP would not lose the ability to seek contribution if a phase of a cleanup occurs after three years of an initial judgment.

The Capuanos disagree and contend, citing Davis, that regardless of when a PRP incurs response costs, a PRP is required to seek a declaratory judgment in a contribution action for any future remediation within three years of being held liable for any type of remediation. Such an argument is self-defeating and proves why a judgment for soil remediation does not trigger the statute of limitations for contribution claims relating to the groundwater remediation. The O'Neil judgment regarding soil remediation triggered the statute of limitations for a contribution action regarding soil remediation. Consequently, R&H sought contribution from other PRPs for the soil remediation. See American Cyanamid v. King Indus., Inc., 814 F. Supp. 215 (D.R.I. 1993). R&H could not, however, seek contribution relating to the soil remediation from the Capuanos because the Capuanos had settled with the government regarding costs associated with soil remediation and, as discussed earlier, settling parties are immune from contribution suits regarding matters addressed in the settlement. See 42 U.S.C. § 9613(f)(2). At the time of the O'Neil judgment, R&H was also unable to seek contribution relating to the groundwater remediation

because it was uncertain whether groundwater remediation was likely to occur. See Davis, 261 F.3d at 47-48 (stating that a PRP may seek a declaratory judgment in a contribution action if the PRP is likely to incur more than its fair share of future cleanup); see also Boeing Co. v. Cascade Corp., 207 F.3d 1177, 1192 (9th Cir. 2000) (stating that declaratory relief is appropriate when "there is a substantial controversy, between parties having adverse legal interests, of sufficient immediacy and reality to warrant" declaratory relief (citation omitted)). Indeed, in 1988, Rhode Island and the United States had not assessed whether there was groundwater contamination at the Picillo site. On appeal in O'Neil, we discussed giving Rhode Island and the EPA "time to conduct further tests" and we discussed the possibility that "after conducting the necessary tests, the government [could] conclude[] [that] there was in fact no harm to the area's groundwater." O'Neil, 883 F.2d at 183. As such, R&H could not seek a declaratory judgment against the Capuanos after the O'Neil judgment because, at the time of the O'Neil judgment, R&H did not have a contribution claim, declaratory or otherwise, against the Capuanos. See Davis, 261 F.3d at 48 (stating that a PRP may seek a declaratory judgment in a contribution action if the PRP is likely to incur more than its fair share of future cleanup). Thus, the O'Neil judgment pertaining to soil remediation could not trigger the statute of limitations for a contribution action for groundwater remediation.

This interpretation of § 9613 comports with the legislative history of the statute of limitations and advances CERCLA's purpose. See Ortega v. Star-Kist Foods, Inc., 370 F.3d 124, 143 (1st Cir. 2004) ("Resort to legislative history is appropriate where, as here, the text of a statute is susceptible to two textually plausible interpretations.").

The legislative history indicates that § 9613 "establishes a three-year statute of limitations for the filing of an action for contribution for response costs or damages. The statute of limitations begins to run at the date of judgment for recovery of response costs or damages or the date of entry of a judicially approved settlement with respect to such costs or damages." H.R. Rep. No. 253 (I), 99th Cong., 1st Sess., at *79 (1985). In discussing the statute of limitations, Congress referred to § 9613(g)(3)(A) and § 9613(g)(3)(B) together. In subsection (B), the statute of limitations is triggered by the "entry of a judicially approved settlement with respect to such costs or damages." 42 U.S.C. § 9613(g)(3)(B). The entry of a judicially approved settlement provides contribution protection only "regarding matters addressed in the settlement" and allows a settling PRP to seek contribution within three years of that settlement for costs incurred in the settlement. See 42 U.S.C. § 9613(f)(2). Similarly, a PRP has three years to seek contribution for costs contained within a judgment. The statute of

limitations, however, is not triggered for costs not contained within the judgment.

Generally, the interpretation of § 9613 implicates two competing principles. On the one hand, "CERCLA's 'essential purpose' [is] making 'those responsible for problems caused by the disposal of chemical poisons bear the costs and responsibility for remedying the harmful conditions they created.'" Boyd v. Boston Gas Co., 992 F.2d 401, 405 (1st Cir. 1993) (quoting Dedham Water Co. v. Cumberland Farms Dairy, Inc., 805 F.2d 1074, 1081 (1st Cir. 1986)). Congress also wanted "to give potentially responsible parties the explicit right to sue other liable or potentially liable parties who also may be responsible for the hazardous waste site." H.R. Rep. No. 253 (I), 99th Cong., 1st Sess., at 15 (1985) (by enacting SARA, Congress wanted to "protect the interests and rights of those who may be held liable for . . . clean-ups.").

On the other hand, the Supreme Court has recognized that statutes of limitations are not disfavored, but rather "'are found and approved in all systems of enlightened jurisprudence' [and] represent a pervasive legislative judgment that . . . 'the right to be free of stale claims in time comes to prevail over the right to prosecute them.'" United States v. Kubrick, 444 U.S. 111, 117 (1979) (citations omitted). Indeed, by passing SARA, Congress recognized that "CERCLA currently includes no explicit statute of limitations for the filing of cost recovery actions [and SARA]

provides for the timely filing of cost recovery actions, to assure that evidence concerning liability and response costs is fresh and to provide a measure of finality to affected responsible parties." H.R. Rep. No. 253 (I), 99th Cong., 1st Sess., at 15 (1985).

Defining "such costs" to identify those costs contained in a judgment upholds both principles. First, it ensures those responsible for environmental damage bear the costs for remedying the harmful conditions they created. An environmental cleanup takes many years to complete. To make the cleanup manageable, it is done in phases. If an initial cost recovery action triggered the statute of limitations for the recovery of any costs in future phases, PRPs could manipulate CERCLA to avoid paying their share. Indeed, by settling with the government for the soil remediation, the Capuanos received contribution protection for the soil remediation only. At the time of the soil remediation, the likelihood of a groundwater cleanup was unknown. Allowing the immunity the Capuanos's received for the soil remediation to effectively shield them from contribution relating to future phases of the cleanup would provide the Capuanos protection for which they never paid -- a result in conflict with the purpose of CERCLA.

Our interpretation of § 9613 also ensures that evidence concerning liability and response costs is fresh and provides a measure of finality to affected responsible parties. To limit "such costs" to those costs contained in a judgment results in a

contribution action tracking the statute of limitations for cost recovery actions. In a cost recovery action, any actions after a declaratory judgment "must be commenced no later than 3 years after the date of completion of all response action." 42 U.S.C. § 9613 (g) (2) (B). Thus, the latest a judgment for the recovery of costs could occur is three years after the completion of a response action. A PRP would then have three years to commence a contribution action. The workings of 42 U.S.C. § 9613, therefore, ensure that evidence concerning liability and response costs is fresh.

B. Res judicata

The Capuanos argue that, under the doctrine of res judicata, R&H is precluded from seeking contribution against them. "The applicability of the doctrine of res judicata is a question of law subject to plenary review." Bay State HMO Mgmt., Inc. v. Tingley Sys., Inc., 181 F.3d 174, 177 (1st Cir. 1999). Under the doctrine of res judicata, "a final judgment on the merits of an action precludes the parties or their privies from relitigating issues that were or could have been raised in that action." Allen v. McCurry, 449 U.S. 90, 94 (1980) (citation omitted). "For a claim to be precluded, there must be: (1) a final judgment on the merits in an earlier action; (2) sufficient identity between the causes of action asserted in the earlier and later suits; and (3)

sufficient identity between the parties in the two suits." Bay State, 181 F.3d at 177.

The Capuanos first argue that R&H cannot seek contribution from them in this case because R&H failed to seek contribution from them in the King Industries case. See King Indus., Inc., 814 F. Supp. 215. The King Industries case was filed after R&H was found liable in O'Neil. In R&H's Second Amended Complaint in King Industries, R&H alleged that the defendants were "jointly and severally liable to the plaintiffs for contribution . . . [for] past and future response costs." R&H entered into multiple settlement agreements and dismissal agreements, approved by the district court, with most of the parties sued in King Industries. See King Indus., Inc., 814 F. Supp. 215. Some of the settlement agreements included dismissals with prejudice. The Capuanos contend that the dismissals with prejudice were judgments on the merits and therefore the doctrine of res judicata should preclude the suit before us from proceeding. We disagree for several reasons.

It is true that "a voluntary dismissal with prejudice is ordinarily deemed a final judgment that satisfies the res judicata criterion." United States v. Cunan, 156 F.3d 110, 114 (1st Cir. 1998). But, a dismissal with prejudice contained in a consent decree "is not a ruling on the merits . . . [that] applies to others under the law of claim preclusion." Langton v. Hogan, 71

F.3d 930, 935 (1st Cir. 1995) (emphasis added). The Capuanos were not defendants in King Industries and were not parties to any of the settlement agreements. Therefore, the dismissal agreements do not have a res judicata effect over claims against the Capuanos.

Second, at the time of the King Industries suit, R&H could not pursue a claim against the Capuanos because the groundwater remediation had not yet occurred and the Capuanos had contribution immunity for claims relating to the soil remediation. "[R]es judicata will not attach if the claim asserted in the second suit could not have been asserted in the first." Mass. Sch. of Law at Andover, Inc. v. Am. Bar Ass'n, 142 F.3d 26, 38 (1st Cir. 1998); González v. Banco Cent. Corp., 27 F.3d 751, 756 (1st Cir. 1994) (stating that "principles of res judicata will bar all claims that either were or could have been asserted in the initial action.").

The Capuanos also argue that R&H is precluded from seeking contribution because of Fed. R. Civ. P. 41(a)(1), also known as the "two dismissal" rule. This Rule states that "an action may be dismissed by the plaintiff without order of court . . . [and] the dismissal is without prejudice, except that a notice of dismissal operates as an adjudication upon the merits when filed by a plaintiff who has once dismissed . . . an action based on or including the same claim." R&H dismissed two cases: the King Industries case and a 1995 contribution lawsuit against the Capuanos filed in the District Court of Rhode Island.

Nonetheless, the "two dismissal" rule does not apply to this case because the dismissal in the King Industries case does not count as a dismissal for purposes of this rule as applied to the Capuanos. The "two dismissal" rule "is not applicable unless the defendants are the same or substantially the same or in privity in both actions." 5 Moore's Federal Practice § 41.04 (2d ed. 1996). The Capuanos were not defendants in King Industries, nor were they in privity with the defendants in King Industries. See generally González, 27 F.3d at 757-63. As a result, the "two dismissal" rule does not preclude R&H's claims against the Capuanos.

C. Contribution Immunity

In 1988, the Capuanos entered settlement agreements with the United States and Rhode Island. In return for contribution immunity, the Capuanos paid \$1,500,000 to the United States and \$500,000 to Rhode Island. The Capuanos argue that their Consent Decree provides contribution immunity against R&H's contribution claims.³ The Capuanos' settlement agreement provided immunity for "future liability" for past response costs, but it did not provide immunity for claims related to "groundwater protection or remediation." The Capuanos argue that R&H failed to prove that the money R&H paid to the United States, and for which R&H now seeks

³ The Capuanos also argue that their settlement agreements prohibits all future contribution claims. The Capuanos abandon this argument, however, after conceding that the "four corners" of the Consent Decree does not support it.

contribution, was for groundwater protection or remediation. We disagree. The Capuanos' argument is nothing more than creative word play. According to the Capuanos, R&H settled with the government for "past response costs." R&H's "past response costs" are costs incurred by the United States through October 25, 1995. Thus, R&H's "past response costs" would be "future liability" for past response costs as it pertains to the Capuanos and the Capuanos have contribution protection for future liability for past response costs.

Regardless of how the Capuanos choose to phrase the costs incurred, it is undisputed that the four corners of the Capuanos Consent Decree does not provide contribution immunity for costs relating to groundwater protection or remediation. At trial, R&H introduced documents detailing the work performed by the United States in regard to the groundwater remediation and introduced the testimony of an expert that the cost of the groundwater Remedial Investigation ("RI") and Feasibility Study ("FS") exceeded \$4.7 million. The expert testified that the groundwater RI/FS was different from the soil RI/FS and the \$4.7 million did not include any costs dealing with the soil remediation. R&H ultimately settled with the United States for \$4.35 million and is seeking contribution for a portion of that amount. The evidence showed, therefore, that the costs R&H paid to the United States, for which it now seeks contribution, were for groundwater protection and

remediation, and the Capuanos do not have contribution immunity for costs relating to groundwater protection or remediation.

In the alternative, the Capuanos argue that even if there was proof showing that R&H is seeking contribution for the RI/FS relating to the groundwater, a RI/FS is part of a "removal action" and is not "groundwater protection or remediation" and thus it is not a cost that was excluded from the Capuanos' Consent Decree.

The RI/FS is part of the groundwater protection and remediation process. "The purpose of the . . . (RI/FS) is to assess site conditions and evaluate alternatives to the extent necessary to select a remedy. Developing and conducting an RI/FS generally includes the following activities: project scoping, data collection, risk assessment, treatability studies, and analysis of alternatives. " 40 CFR 300.430. Since the RI/FS is the first step in groundwater protection and remediation, the RI/FS is not a cost excluded by this Consent Decree.

III. Issues relating to the trial

In reviewing the appeal of a bench trial, we review the district court's legal conclusions de novo and its factual findings for clear error. Cariglia v. Hertz Equip. Rental Corp., 363 F.3d 77, 82 (1st Cir. 2004).

A. Fed. R. Civ. P. 19 joinder

The Capuanos argued to the district court that Fed. R. Civ. P. 19(a) required all non-settling PRPs to be joined as "necessary" parties. The district court held that Rule 19 does not require joinder of other known solvent PRPs. In their appellate brief, the Capuanos mention the Rule 19 issue, but do not provide any arguments as to why Rule 19 requires other PRPs to be joined. Since the Capuanos failed to develop any argument, we consider this issue waived. See United States v. Bongiorno, 106 F.3d 1027, 1034 (1st Cir. 1997) ("We have steadfastly deemed waived issues raised on appeal in a perfunctory manner, not accompanied by developed argumentation.").

B. Allocation of shares of liability

After trial, the district court concluded that the Capuanos, as operators, were "liable for the total volume (100%) of waste dumped at the Picillo site." The Capuanos were also "liable for a share of the waste dumped at the Picillo site as arrangers [and they were] liable as transporters for 7.94% of the total waste delivered to the site." The district court concluded that R&H was liable for 3.23% of the waste.

Before allocating percentage shares of liability, the district court informed the Capuanos that it would "consider the relative fault of non-parties in arriving at an equitable allocation of liability." The district court did not ultimately

consider the relative fault of non-parties when allocating liability because the parties failed to present evidence concerning the relative fault of non-parties. According to the district court, the Capuanos' "decision not to present any evidence that may have mitigated their liability . . . is one they will have to live with." The Capuanos, not wanting to "live with" it, appealed the issue, arguing that a district court cannot make a proper allocation unless it accounts for the shares of all PRPs, regardless of whether the PRPs are parties to the action and regardless of whether evidence was presented regarding the absent PRP's actions.

In resolving contribution claims, a district court has broad discretion to "allocate response costs among liable parties using such equitable factors as the court determines are appropriate." 42 U.S.C. § 9613(f)(1). It is not unprecedented for a district court to reason "that a fair and equitable allocation [can] only be achieved by comparing [a defendant's] role as a PRP to other PRPs." United States v. Consol. Coal Co., 345 F.3d 409, 414 (6th Cir. 2003). However, the decision to allocate response costs among the named parties or all parties "is within the Court's discretion to adopt and apply." United States v. Consol. Coal Co., 184 F. Supp. 2d 723, 745 (S.D. Ohio 2002). Indeed, in some cases apportioning responsibility among all PRPs is not an attractive option as it could "complicate an already difficult allocation

process or saddle firms . . . with excess costs" and "might take years of trial time." Akzo Nobel Coatings, Inc. v. Aigner Corp., 197 F.3d 302, 306 (7th Cir. 1999).

R&H provided the district court with evidence indicating that the Capuanos were liable, as operators, for 100% of the waste at the Picillo site. The district court did not abuse its discretion in reaching such a conclusion since the district court found the evidence to be "credible" and, more important for the purposes of this discussion, "unrefuted." See, e.g., United States v. Davis, 31 F. Supp. 2d at 68 (allocating 100% liability among the parties to the action, even though many other PRPs existed).

C. Accounting for settlements of other PRPs

The district court concluded that R&H paid the United States government \$4,636,725 for groundwater related cleanup costs. By using a pro tanto approach and subtracting the \$382,807 R&H received in settlements, the district court concluded that the net total R&H paid to the United States for the groundwater cleanup was \$4,253,918. Since R&H's share of the cleanup, based upon 3.23% of liability, was \$1,602,080, the Capuanos were held liable for \$2,651,838 -- the amount R&H paid in excess of their share.

The Capuanos argue that the district court erred in making this calculation because the district court should have determined the equitable pro-rata share of liability of the settling PRPs rather than deducting the monetary amount of the

settlements from R&H's costs. CERCLA, as amended by SARA, states that "[a] person who has resolved its liability to the United States or a State . . . does not discharge any of the other potentially liable persons unless its terms so provide, but it reduces the potential liability of the others by the amount of the settlement." 42 U.S.C. § 9613(f)(2) (emphasis added). We have held that this "plain language admits of no construction other than a dollar-for-dollar reduction of the aggregate liability." United States v. Cannons Eng. Corp., 899 F.2d 79, 92 (1st Cir. 1990).

CERCLA also allows a private party to seek contribution from non-settling parties, but, unlike a settlement with the United States or a State, CERCLA does not instruct a court as to how a settlement agreement between two private parties affects the contribution liability of non-settling parties. See 42 U.S.C. § 9613(f)(1). Rather, CERCLA charges a district court to "allocate response costs among liable parties using such equitable factors as the court determines are appropriate." 42 U.S.C. § 9613(f)(1).

We read this provision to give the district court discretion regarding the most equitable method of accounting for settling parties. We believe that the district court did not abuse its discretion by applying the pro tanto approach given the circumstances of this case. Courts that have addressed the issue of a private-party contribution suit involving settling parties have debated between two approaches. The first approach, the claim

reduction approach, advanced by the Capuanos, follows the method of the Uniform Comparative Fault Act ("UCFA"), which provides that the liability of non-settlers is reduced by the proportionate share of fault attributed to the settling parties. UCFA § 2.⁴ The second approach, the pro tanto approach, follows the method of the Uniform Contribution Among Tortfeasors Act ("UCATA"), which reduces the liability of litigants by the dollar amount of third-party settlements. UCATA § 4; see Akzo Nobel Coatings, Inc., 197 F.3d at 307-08.

Both of these approaches have distinct advantages and disadvantages. The claim reduction approach "requires the court to determine the responsibility of all firms that have settled, as well as those still involved in the litigation." Id. at 307. Such a process can lead to a "complex and unproductive inquiry" and may be unrealistic in situations where waste was deposited by hundreds of polluters for years, if not decades, prior to the litigation. Id. The claim reduction approach has the benefit, however, of

⁴ See Pneumo Abex Corp. v. Bessemer & Lake Erie R.R. Co., 936 F. Supp. 1274 (E.D. Va. 1996); United States v. GenCorp, Inc., 935 F. Supp. 928 (N.D. Ohio 1996); Hillsborough Co. v. A & E Road Oiling Serv., Inc., 853 F. Supp. 1402 (M.D. Fla. 1994); Atlantic Richfield Co. v. American Airlines, Inc., 836 F. Supp. 763 (N.D. Okla. 1993); Barton Solvents v. Southwest Petro-Chem., Inc., 834 F. Supp. 342 (D. Kan. 1993); City & County of Denver v. Adolph Coors Co., 829 F. Supp. 340 (D. Colo. 1993); United States v. SCA Serv. of Ind., Inc., 827 F. Supp. 526 (N.D. Ind. 1993); King Indus., Inc., 814 F. Supp. at 215; Comerica Bank-Detroit v. Allen Indus., Inc., 769 F. Supp. 1408 (E.D. Mich. 1991).

ensuring, in theory, that damages are apportioned equitably among the liable parties.⁵

In contrast, under the pro tanto approach "a litigating defendant's liability will frequently differ from its equitable share, because a settlement with one defendant for less than its equitable share requires the nonsettling defendant to pay more than its share." McDermott, Inc. v. AmClyde, 511 U.S. 202, 212 (1994); see Lewis A. Kornhauser & Richard L. Revesz, Settlements Under Joint and Several Liability, 68 N.Y.U. L. Rev. 427, 474 (1993). Nonetheless, the pro tanto approach is easier to administer and is the approach adopted by CERCLA when there is a settlement between a person and the United States or a State. See 42 U.S.C. § 9613 (f) (2).

The different approaches to accounting for settling parties can produce different results and, for uniformity purposes, it may be wise to choose one of these two approaches. See McDermott, Inc., 511 U.S. at 207 (granting certiorari because the courts of appeals had differing approaches for determining how a settlement with less than all of the defendants in an admiralty

⁵ This benefit varies. For example, assume there are four PRPs, labelled PRP A-D, and that PRP A settled with the government for \$100,000. Also assume PRP A settled with PRP B for \$20,000, but went to trial against PRP C & D. If, at trial, the court determined that PRP B was responsible for \$40,000, then PRP A, C & D would be responsible for the \$60,000 total remaining. The \$20,000 not awarded would be borne entirely by PRP A. In contrast, had PRP A settled with PRP B for \$50,000, then PRP A would experience a \$10,000 windfall.

case affect the liability of non-settling defendants). At this juncture, however, we decline to do so. CERCLA provides the district court with the discretion to allocate response costs among liable parties, and we believe that determining how a settlement affects the liability of the non-settling parties is within that discretion. While it is not unimaginable that the use of one of these approaches might produce a result so inequitable that it would constitute an abuse of discretion, in this case it did not and therefore we do not disturb the district court's utilization of the pro tanto approach.

D. The district court's factual findings

The Capuanos contend that the district court committed clear error by basing its findings of fact on the deposition testimony of Warren Picillo, Sr., rather than on the deposition testimony of Jack and Daniel Capuano. Ultimately, "weighing the evidence and assessing the witnesses' credibility is uniquely the province of the district court" and when there are "two permissible views of the evidence . . . the factfinder's choice between those competing views cannot be clearly erroneous." Fed. Refinance Co. Inc. v. Klock, 352 F.3d 16, 29 (1st Cir. 2003) (citations omitted). The task of assessing witness credibility in this case was a difficult one as both sides produced testimony calling for scrupulous credibility evaluation. On the one hand, the testimony contained in Warren Picillo's deposition was tainted by the fact

that he had attempted to extort money from the Capuanos in exchange for his silence or favorable testimony. On the other hand, the testimony of Jack and Daniel Capuano was, in the district court's words, "wholly incredible" as they openly admitted that their prior deposition testimony contained "carefully constructed lies." In the end, the district court had to determine whose testimony was believable by examining the testimony of all the parties in relation to the documentary evidence. After conducting the requisite inquiry, we conclude that the district court did not commit clear error in its factual findings.

E. Transporter Liability

The Capuanos appeal the district court's conclusion that the Capuanos transported hazardous waste to the Picillo site. CERCLA imposes transporter liability on "any person who accepts or accepted any hazardous substances for transport to disposal or treatment facilities, incineration vessels or sites selected by such person" from which there is a release of hazardous substances. 42 U.S.C. § 9607(a)(4). The district court concluded that United Sanitation and its officers, Jack and Daniel Capuano, were liable as transporters for 7.94% of the waste delivered to the Picillo site since Jack and Daniel selected the Picillo site and United Transportation transported 960 55-gallon drums of hazardous waste to the site.

The Capuanos argue that the district court's finding was clearly erroneous because (1) United Sanitation did not transport hazardous waste; (2) United Sanitation and the Capuanos had no trucks capable of transporting hazardous waste; and (3) the only Capuano remotely identified with hazardous waste disposal was Anthony Capuano. After examining the record, we find that the district court's conclusion that the Capuanos were "transporters" was not clearly erroneous.

First, Picillo testified that "the Capuanos themselves brought their own waste down [to the Picillo site] on their own trucks" and that some of the barrels "came from Danny Capuano's place." Although this testimony supports the finding that the Capuanos physically transported some of the waste, we have interpreted CERCLA not to impose liability on a transporter who merely follows the directives of a generator. See Davis, 261 F.3d at 55. Rather, for CERCLA liability to attach, a transporter must "actively participate in the selection decision or have substantial input in that decision." Id. In this case, the Capuanos had substantial input in the decision, often making the final determination whether to allow waste to be dumped at their own land fill or to send it on to the Picillo site. Further, the Capuanos arranged for employees of the Scientific Chemical Corporation to visit the Picillo site as a possible waste dumping location. After

viewing the site, the visitors concluded "this would be an ideal spot."

Second, according to deposition and trial testimony, trucks carrying hazardous waste would arrive at the Capuanos place of business only to be redirected by the Capuanos, or their employee Louie Falcone, to the Picillo site. Indeed, since the Picillo site was difficult to find, the Capuanos would come to the Picillo site "in a pick-up truck in front of the big trucks and show them where the farm was and show them where the dump was, to dump" the hazardous waste. See 42 U.S.C. § 9601(26) (defining "transportation" as "the movement of a hazardous substance by any mode").

Third, when the drivers arrived at the Picillo site, they would give Picillo, Sr. a bill of lading. At the end of the week, Picillo, Sr. would take the bills of lading to the Capuanos to get paid. The record confirms that Mr. Picillo received United Sanitation checks signed by Jack Capuano and Dan Capuano. Although these payments do not, in and of themselves, prove that the Capuanos transported the waste, the payments do support the inference that the Capuanos were involved with the transportation of waste to the Picillo site.

F. Operator Liability

The Capuanos appeal the district court's conclusion that the Capuanos were liable as operators of the Picillo site. CERCLA

imposes liability on "the owner and operator of a vessel or a facility." 42 U.S.C. § 9607(a)(2). "The phrase 'owner and operator' is defined only by tautology . . . as 'any person owning or operating' a facility, § 9601(20)(A)(ii). . . ." United States v. Bestfoods, 524 U.S. 51, 56 (1998). The Supreme Court has clarified that, "under CERCLA, an operator is simply someone who directs the workings of, manages, or conducts the affairs of a facility." Id. at 66. More specifically, "an operator must manage, direct, or conduct operations specifically related to pollution, that is, operations having to do with the leakage or disposal of hazardous waste, or decisions about compliance with environmental regulations." Id. at 66-67.

The district court's conclusion that the Capuanos were operators of the site was not clearly erroneous. First, the Capuanos approached Warren Picillo with the idea of dumping on his pig farm. Once Warren agreed, he gave the Capuanos exclusive disposal rights at the site and the Capuanos hired a bulldozer to clear the trees and "dig a big, big hole." The Capuanos walked the operator of the bull-dozer to the site and "showed him what to do and how to do it." Such actions are consistent with those of an operator of a facility "who directs the workings of, manages, or conducts the affairs of a facility." Id. at 56 (1999).

Second, as discussed earlier, the Capuanos directed the hazardous waste to the Picillo site. If the drivers of the waste

did not know how to reach the site, the Capuanos would drive them to the site so they could dump the waste. Further, the Capuanos managed and conducted the affairs of the Picillo site by organizing and implementing its payment structure. The waste generators paid the Capuanos to dispose of their waste and then the Capuanos would give Warren Picillo a share of the money. "[O]perator liability requires an ultimate finding of . . . involvement with operations having to do with the leakage or disposal of hazardous waste." United States v. Kayser-Roth Corp., 272 F.3d 89, 102 (1st Cir. 2001) (internal quotations and citation omitted). The fact that the Capuanos developed the idea for using the site, prepared the site for dumping, arranged for waste to be dumped at the site, showed transporters where to dump on the site, and collected payment and transmitted a share to Warren Picillo for dumping at the site demonstrates that the district court's conclusion that the Capuanos were liable as operators of the site was not clearly erroneous.

G. Arranger Liability

The Capuanos appeal the district court's conclusion that the Capuanos were liable as arrangers. The district court concluded that the Capuanos were arrangers because their conduct "constituted active participation as a broker in the disposal of their customer's waste." The Capuanos argue that arranger liability can only be imposed on a party that owned or possessed

hazardous materials, not on a party that brokered the disposal of hazardous material. We review whether arranger liability can attach to a party that brokered the disposal of waste de novo as such review entails statutory interpretation of 42 U.S.C. § 9607 (3). See United Techs. Corp., 33 F.3d at 98. We review whether the Capuanos acted as a broker for the disposal of hazardous waste for clear error.

An arranger is defined as

any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by such person, by any other party or entity, at any facility . . . owned or operated by another party or entity and containing such hazardous substances,

42 U.S.C. § 9607(3) (emphasis added). We begin our inquiry by examining the plain language of the statute. This portion of 42 U.S.C. § 9607(3) can be read two ways, depending on which words the clause "by any other party or entity" modifies. First, this clause can be read to modify the preceding words "owned or possessed by such persons," which would make liable any person who arranged for the disposal of a hazardous substance "owned or possessed by such person [or] by any other party or entity." See United States v. Mottolo, 629 F. Supp. 56, 60 (D.N.H. 1984) (holding that the arranger liability "provision clearly states that the person who arranges for disposal or transport for disposal of hazardous

substances need not own or possess the waste"). Or, second, the clause can be read to modify the words "disposal or treatment," which would make the sentence read "any person who . . . arranged for disposal or treatment . . . by any other party or entity." The sentence structure of § 9607(3) makes it clear that the latter interpretation is the correct one. The clause "by any other party or entity" clarifies that, for arranger liability to attach, the disposal or treatment must be performed by another party or entity, as was the case here.

Some courts have held parties liable as arrangers even if they did not actually own or physically possess the hazardous waste so long as they had the authority to control the handling and disposal of the hazardous substances. See United States v. Northeastern Pharm. & Chem. Co., 810 F.2d 726, 743 (8th Cir. 1986) (holding that "requiring proof of personal ownership or actual physical possession of hazardous substances as a precondition of liability . . . would be inconsistent with the broad remedial purposes of CERCLA"); Gould, Inc. v. A.M. Battery & Tire Serv., 954 F. Supp. 1020 (M.D. Pa. 1997); New York v. SCA Servs., Inc., 844 F. Supp. 926 (S.D.N.Y. 1994); Emergency Technical Servs. Corp. v. Morton Int'l, 1993 U.S. Dist. LEXIS 8018 (N.D. Il. 1993); United States v. Bliss, 667 F. Supp. 1298 (E.D. Mo. 1987); Mottolo, 629 F. Supp. at 60; see also Sea Lion v. Wall Chem. Corp., 974 F. Supp. 589, 596 (S.D. Tex. 1996) (noting that "under definitive and well

reasoned authorities, the ownership definition [for arranger liability] is quite broad and includes constructive possession"). Most of these cases involved a corporate officer of a generator of hazardous waste claiming he could not be liable as an arranger because he did not personally own or possess the waste. Northeastern Pharm., 810 F.2d at 746 (holding that a corporate officer is liable as an arranger for making corporate decisions about the handling and disposal of hazardous substances); Mottolo, 629 F. Supp. at 60 (discussing the liability of a corporate officer). Thus, these holdings reflect the idea that a corporate officer can be liable as an arranger if he controls the decision to dispose of the waste on behalf of his company that owns the waste. These cases are distinguishable from the case at hand because this case does not involve corporate officers; rather it involves a party that does not own the waste and that arranges for the disposal of others' waste.

The case of SCA Services, 844 F. Supp. 926, although similar to this case, is also distinguishable. In SCA Services, a transporter accepted waste for disposal. Subsequent to the pickup, the transporter learned it could not dispose of the waste at its designated site, so the transporter arranged for a different transporter to pick up the waste and dispose of it. Id. at 928. In SCA Services, the first transporter went beyond its role as transporter and effectively became an arranger by taking possession

of the waste and making arrangements for the waste to be picked up and disposed of by another company. Id. Unlike the transporter in SCA Services, though, the Capuanos did not take possession of the waste before arranging to have it disposed by another transporter.

There is a category of cases, however, that involves defendants similar to the Capuanos, brokers who arranged for a generator's waste to be disposed of illegally. See Gould, Inc. 954 F. Supp. 1020 (a broker who arranged for the disposal of waste, made contact with the site, and received a profit is liable as an arranger); Emergency Technical, 1993 U.S. Dist. LEXIS 8018 (holding that a broker who was actively involved in the timing, manner and location of the disposal of hazardous substances could be liable as an arranger); Bliss, 667 F. Supp. 1298 (broker liable as an arranger because controlled the place and manner of disposal). These cases involved brokers who did not own or transport hazardous waste but controlled the hazardous waste's disposal. These courts held that a broker could be liable as an arranger, and we agree.

When a broker arranges for the disposal of hazardous waste and it does so by exercising control over the waste, such control can amount to constructive possession of the waste. Were we to interpret CERCLA not to impose liability on a party that constructively possessed hazardous waste and arranged for its illegal disposal, then the statute would be subject to a loophole through which brokers and middlemen could escape liability by

arranging to have hazardous waste picked up and deposited at an illegal site. In addition to escaping liability, the broker would also profit by charging a fee for his services. Indeed, the Capuanos earned most of their profits in this manner. The Capuanos found a site, the Picillo pig farm, where hazardous waste could be dumped illegally. They then arranged for the waste to be picked up from various waste generators across New England and dumped on the illegal site. A broker should not be able to profit from such activity, much less escape liability. We therefore hold that a broker can be liable as an arranger if the broker controls the disposal of the waste.

Since the Capuanos, as discussed above, selected, secured, and directed the waste to the Picillo site, all for a fee, it was not clearly erroneous for the district court to conclude that the Capuanos were liable as arrangers given our interpretation of the statute.

IV. Post-trial issues

A. Measure of contribution entitlement

The district court entered a monetary judgment in favor of R&H based upon the costs associated with the groundwater cleanup. The Capuanos contend that any contribution entitlement should have been based on aggregate response costs, including monies expended on soil remediation. We review the district

court's legal conclusion on this issue de novo. Cariglia v. Hertz Equip. Rental Corp., 363 F.3d 77, 82 (1st Cir. 2004).

In interpreting CERCLA's contribution provisions, this circuit "give[s] the word 'contribution' its generally accepted legal meaning." Browning-Ferris Indus., 33 F.3d at 99. When applied to an environmental case, the term contribution "refers to an action by a responsible party to recover from another responsible party that portion of its costs that are in excess of its pro rata share of the aggregate response costs." Id. at 103 (emphasis added). Focusing on the words "aggregate response costs," the Capuanos contend that the district court erred by not calculating the soil remediation costs together with the groundwater remediation costs. We disagree. Contribution is the right "of one who has discharged a common liability to recover of another also liable, the aliquot portion which he ought to pay or bear." Id. at 99 (quoting Black's Law Dictionary 399 (6th ed. 1990)). In the action before the district court, the Capuanos and R&H shared common liability for the groundwater remediation only. Since the Capuanos had contribution immunity for costs relating to the soil remediation, it was not error for the district court to conclude that the costs associated with the soil remediation were not relevant.

B. Awarding of contribution entitlement

The district court determined that R&H's share of liability for its hazardous waste at the Picillo site was 3.23%. R&H paid the United States \$4,636,725 in groundwater cleanup costs and received \$382,807 in settlements. Thus, R&H's total net payment for the groundwater cleanup to the United States was \$4,253,918.

The district court concluded that the total estimated cost of the groundwater cleanup would be \$49,600,000. By multiplying the total estimated cost of the cleanup (\$49,600,000) by R&H's share of responsibility (3.23%), the district court concluded that R&H's share of payment for the groundwater remediation should have been \$1,602,080. Since R&H had already paid \$4,253,918, the district court concluded that the Capuanos were liable for the \$2,651,838 that R&H paid over its fair share (\$4,253,918 - \$1,602,080).

The Capuanos contend that the district court should not have entered a monetary judgment since the cost of the groundwater cleanup is unknown and, therefore, it is impossible to calculate whether R&H paid an amount in excess of its pro rata share. It is firmly established in this circuit that a party may seek declaratory relief in a contribution action. Davis, 261 F.3d at 47. By allowing such relief, parties "will know their share of costs before they are incurred." Id. (citing Boeing Co., 207 F.3d

at 1191). Indeed, "the more liability can be limited and quantified, the more practical it is for a party to budget and borrow to finance it." Boeing Co., 207 F.3d at 1191. Taking this logic one step further, the district court in this case entertained estimates of the costs of the groundwater remedy and entered a judgment based on the submitted evidence. In so doing, the district court did not abuse its discretion.

R&H presented the district court with three alternatives for calculating estimated response costs. First, R&H proposed that the common liability was \$5,969,202.52, based upon the response costs the United States incurred until this litigation in the district court. As the district court correctly noted, this amount is only a small fraction of the costs expected to be incurred in the future. Second, R&H submitted the total costs for the groundwater remedy as estimated by the EPA's Record of Decision, which was \$22,300,000. Last, R&H submitted the estimate provided by the Ashland Group, a group of PRPs that has sued R&H for contribution in the United States District Court for the District of New Jersey. This estimate was \$49,600,000.

In some cases, it may be impossible to estimate the total cost of a remediation. In other cases, the available estimates may be too outdated to make an informed calculation. In this case, however, the district court was presented with a recent estimate

provided by a group of companies performing the groundwater remedy. The Capuanos did not challenge the accuracy of this estimate.

The district court acted consistent with CERCLA's goals by entering a monetary judgment before the remediation was completed. Entering a monetary judgment fosters an incentive for timely settlements and provides finality for those parties that choose to settle. See United Techs. Corp., 33 F.3d at 103 (stating that CERCLA "was designed to encourage settlements and provide PRPs a measure of finality in return for their willingness to settle").

By settling with the United States, a PRP pays a portion of the response costs. By seeking contribution from other PRPs, a settling PRP seeks to recoup the portion it paid in excess of its pro rata share. If a PRP is unable to receive a monetary judgment until the remediation process is complete, then a PRP may be reluctant to settle knowing it will be unable to recoup any money it paid in excess of its pro rata share until the remediation is completed. In contrast, by not settling, a PRP could be held liable for a percentage of the cleanup in a contribution action but forestall payment of that percentage until the cleanup is completed. Thus, a non-settler could avoid payment to the PRP that did settle for many years, if not decades. Such an approach favors a non-settling PRP over a settling PRP, the antithesis of what CERCLA was enacted to achieve.

Entering a monetary judgment is a double-edged sword for both parties. For example, in this case, if the response costs are more than estimated, R&H will receive a windfall at the expense of the Capuanos. In contrast, if the response costs are less than estimated, the Capuanos will receive a windfall at the expense of R&H. In a CERCLA action, the district court is afforded broad discretion in apportioning liability because it is very difficult to determine accurately the liability of each party. As a result, one party may be forced to pay more than its equitable share. See, e.g., Davis, 261 F.3d at 48-49; United Techs. Corp., 33 F.3d at 102-03; United States v. Charles George Trucking, Inc., 34 F.3d 1081, 1086 (1st Cir. 1994). The fact that the monetary judgment is entered based on an estimate, therefore, does not on its own make that judgment unjust. The district court entertained many possibilities regarding the estimate of total response costs and both sides had opportunities to suggest whether the estimated response cost was too low or too high. After reviewing the possible estimated costs, the district court concluded that \$49,600,000 was the best estimate of total response costs and entered a judgment using that estimate. We believe it was not error to do so.

C. Joint and Several Liability

The district court held that "judgment shall enter against Defendants Jack and Daniel Capuano, and United Sanitation"

in the amount of \$2,651,838. The Capuanos briefly argue that the district court erred by entering judgment in this manner and that the district court should have allocated a percentage of responsibility to Jack and Daniel individually for which they would have been severally liable. As we stated previously, "we have steadfastly deemed waived issues raised on appeal in a perfunctory manner, not accompanied by developed argumentation." See Bongiorno, 106 F.3d at 1034. The dearth of argumentation not only deprives this court an explanation of the basis of an argument, it also confuses one's adversary. Indeed, the Capuanos brief argumentation on this point produced a tangential line of argumentation from R&H in response, resulting in the proverbial two ships passing in the night. Therefore, we will not address this issue and consider it waived.

D. Pre-judgment interest

The district court awarded R&H prejudgment interest citing the language of 42 U.S.C. § 9607, which provides that "[t]he amounts recoverable in an action under this section shall include interest on the amounts recoverable Such interest shall accrue from the later of (i) the date payment of a specified amount is demanded in writing, or (ii) the date of the expenditure concerned." 42 U.S.C. § 9607(a). The Capuanos argue that the district court's reliance on § 9607 was misplaced since this action was brought pursuant to § 9613, not § 9607. The prejudgment

interest statute specifically limits itself to amounts recoverable "under this section." Reviewing this question of statutory interpretation de novo, we affirm the awarding of prejudgment interest. See United Techs. Corp., 33 F.3d at 98.

Prior to the passage of SARA, there was "much uncertainty . . . as to whether a responsible party could recover from other PRPs the portion of its cleanup costs that exceeded its pro rata share." Id., at 100 (citation omitted). This uncertainty ended when Congress adopted 42 U.S.C. § 9613. "A principal goal of [this] new section 9613 was to clarify and confirm the right of a person held jointly and severally liable under CERCLA to seek contribution from other potentially responsible parties" Id. (quotation marks and citations omitted). Thus, § 9613 begins by incorporating provisions of § 9607. See 42 U.S.C. § 9613(f)(1) (stating that "[a]ny person may seek contribution from any other person who is liable or potentially liable under section 107(a) [42 U.S.C.S. § 9607(a)]"). Since the prejudgment interest provision of § 9607 refers to "actions under this section" and because § 9613(f) incorporates the liability provisions of § 9607, an action for contribution also incorporates the prejudgment interest provision. See Consol. Coal Co., 345 F.3d at 415; Goodrich Corp. v. Town of Middlesbury, 311 F.3d 154, 177 (2d Cir. 2002); Bancamerica Commercial Corp., v. Mosher Steel of Kansas, Inc., 100 F.3d 792, 801 (10th Cir. 1996). For some purposes, such as statutes of

limitations, § 9613 and § 9607 are "distinct, non-overlapping anodynes." United Techs. Corp., 33 F.3d at 103 (distinguishing between the different statutes of limitations for a § 9607 and a § 9613 action). But, since § 9613 incorporates the liability provision of § 9607, we believe it also incorporates the prejudgment interest provision.

As the Tenth Circuit stated, and the Second Circuit agreed, such a conclusion is consistent with both logic and policy. Bancamerica Commercial Corp., 100 F.3d at 801; Goodrich Corp., 311 F.3d at 177.

The purpose of contribution is to equitably apportion response costs among liable parties. Failure to grant prejudgment interest on contribution awards may instead result in inequitable apportionment, because parties awarded contribution will still have lost the time value of the money they spent on behalf of other liable persons, and those persons will have gained an equal amount. Further, refusal to grant prejudgment interest is a disincentive for private parties to voluntarily undertake cleanup actions because they will lose the time value of the money they spend on behalf of other persons. Indeed, it would create a perverse incentive for responsible parties to delay involvement in cleanups, because as they delay, they gain the time value of the funds they should be investing in the cleanup.

Bancamerica Commercial Corp., 100 F.3d at 801 (emphasis in original); see also Goodrich Corp., 311 F.3d at 177.

The conclusion that awarding prejudgment interest was appropriate does not end our inquiry. The Capuanos also contend

that prejudgment interest cannot be awarded because R&H waited to supplement the record after trial -- rather than submitting evidence during trial -- regarding accrual dates and numbers required to calculate interest. Other circuits have held, and we agree, that "because interest determinations are compounded calculations, it may be impossible for parties to provide accurate calculations prior to the court's allocation of response cost liability. In such instances, parties may submit their interest calculations to the court subsequent to that finding." Bancamerica Commercial Corp., 100 F.3d at 802 (citing cases); United States v. Town of Brighton, 153 F.3d 307, 321 (6th Cir. 1998). Therefore, the district properly awarded prejudgment interest.

Last, the Capuanos argue that the district court erred by accepting the accrual date submitted by R&H. The district court calculated prejudgment interest from May 5, 1999, the date when R&H made a written demand to the Capuanos. The Capuanos argue, however, that this written demand letter was never presented to the district court during or after the trial. Attached to R&H's motion for prejudgment interest was an "Exhibit A" which calculated prejudgment interest from May 5, 1999 through July 31, 2003. The district court relied on this exhibit and found that the letter was sent on May 5, 1999. The Capuanos did not object to this finding. Therefore, the prejudgment interest award is affirmed. See Town of Brighton, 153 F.3d at 321 (stating that there was "an adequate

basis for the district court to calculate prejudgment interest" when the plaintiff "claim[ed], without refutation, that it issued a demand letter" on a certain date).

V. Conclusion

For the reasons discussed herein, we affirm the judgment of the district court.

Affirmed.