IN THE SUPREME COURT OF TEXAS

No. 13-0084

HOUSTON UNLIMITED, INC. METAL PROCESSING, PETITIONER,

v.

MEL ACRES RANCH, RESPONDENT

ON PETITION FOR REVIEW FROM THE COURT OF APPEALS FOR THE FOURTEENTH DISTRICT OF TEXAS

Argued December 5, 2013

JUSTICE BOYD delivered the opinion of the Court.

JUSTICE BROWN did not participate in the decision.

In this case, the owner of land that was contaminated by a neighbor seeks to recover for loss of the land's market value based on "stigma" that remained after the contamination subsided. Although some federal and other states' courts have recognized a legal right to recover stigma damages, we have never addressed the issue. We decline to do so here, however, because even if we recognized such a right, the landowner's evidence of lost market value in this case is not legally sufficient to support the trial court's judgment. We must therefore reverse and render a takenothing judgment in the defendant's favor.

I. Background

Mel Acres Ranch owns a 155-acre tract of undeveloped ranchland off Highway 290 in Chappell Hill, Texas. Across the highway, Houston Unlimited, Inc. operates a metal processing facility. Rainwater flows from the area around the metal processing facility through a culvert under the highway and into a large stock tank on the ranch. In late 2007, a rancher who was leasing the ranch complained that his calves had experienced a number of birth defects and deaths. The rancher's associate reported that he had seen a Houston Unlimited employee "dumping" contents of a large drum into the culvert and that pipes were discharging materials from Houston Unlimited's facility. Mel Acres hired an environmental consultant to test the area for contaminants. These tests revealed the presence of arsenic, chromium, copper, nickel, and zinc exceeding "state action levels"¹ in water in the culvert, and the presence of copper exceeding state action levels in the water in the stock tank.

In light of these results, Mel Acres filed a complaint with the Texas Commission on Environmental Quality. Commission inspectors soon made an unannounced visit to Houston Unlimited's facility and took their own soil and water samples. In the area near the culvert behind the facility, water samples revealed the presence of chromium, copper, lead, nickel, and zinc exceeding state action levels and a "corrosive and hazardous" pH level, and soil samples revealed the presence of aluminum and chromium exceeding state action levels. From the culvert between Houston Unlimited's property and Highway 290, water samples revealed chromium, copper, aluminum, and zinc in excess of state action levels, and soil samples revealed aluminum in excess of state action levels. Water samples from the stock tank on Mel Acre's ranch revealed the presence of copper in excess of state action levels.

¹ The parties use the term "state action level" to refer to the level of the presence of a contaminant above which the state, through the Texas Commission on Environmental Quality, will require an owner or operator of a facility to take "corrective action." *See, e.g., E-Z Mart Stores, Inc. v. Ronald Holland's A-Plus Transmission & Automotive, Inc.*, 358 S.W.3d 665, 669 (Tex. App.—San Antonio 2011, pet. denied). The Commission's regulations define this as the level that, "in the opinion of the agency," is "harmful to human health and safety or the environment." 30 TEX. ADM. CODE § 334.504(b). These levels are "determined by the agency," which "may issue additional directives should the corrective action activities prove to not be effective in reducing the contaminant levels at a sufficient rate." *Id.* § 334.504(c), (d).

The Commission's inspectors discovered during their visit that Houston Unlimited was in violation of several regulations governing its discharge of hazardous waste² and concluded that it had committed an unauthorized discharge of industrial hazardous waste that had affected Mel Acres' property. Houston Unlimited's general manager admitted to the inspectors that Houston Unlimited had dumped barrels of spent blast media (a substance used to clean metal and prepare it for further treatment) on the ground behind its facility for twenty-five years. The Commission formally cited Houston Unlimited for failing to prevent the discharge of industrial hazardous waste into or adjacent to waters of the state, ordered it to cease all discharge activity and initiate clean-up activities, and ordered it to perform an Affected Property Assessment Report regarding Mel Acres' ranch. The Commission also pursued an enforcement action in which it later assessed a fine against Houston Unlimited.

After the inspectors' visit, Houston Unlimited stopped dumping spent materials behind the facility, constructed a berm to prevent contaminated water from flowing onto the ranch, and took other steps to bring its facility into compliance. In the process, it discovered two pipe leaks in its processing system, which it admits could have caused contaminated water to flow into the ranch's stock tank. It replaced the two pipes and installed a secondary containment mechanism to protect against future leaks. It also hired a consulting company to perform the required Affected Property Assessment Report. This consultant found no constituents exceeding state action levels in the

² Houston Unlimited was registered with the Commission and permitted to generate certain levels of hazardous waste, but environmental regulations placed requirements and restrictions on the handling and disposal of the waste. The Commission determined that Houston Unlimited was in violation because it failed to (1) have a storm water permit; (2) implement a Storm Water Prevention Pollution Plan to regulate materials that might emanate from the facility via rainwater; (3) maintain updated registration information; (4) implement a Source Reduction and Waste Minimization Plan; and (5) maintain the required employee-training program for disposal of hazardous wastes. The Commission also noted that the property was lacking a required berm or other structure to prevent water containing various processing materials from flowing off-site.

water sample from the stock tank but did find chromium and nickel exceeding state action levels in sediment samples.³ The consultant concluded that there was no evidence that Houston Unlimited's activities had any ongoing adverse impact on water quality in the stock tank. Using these test results, Houston Unlimited submitted an Affected Property Assessment Report to the Commission, followed by an Ecological Risk Assessment. The Commission approved the Ecological Risk Assessment but had not approved the Affected Property Assessment Report as of the date of trial.

Mel Acres hired its own environmental consultant, who took water and sediment samples and found that the water in the stock tank contained pH, aluminum, and iron exceeding state action levels, and detected the presence of other constituents not exceeding state action levels. The parties and their consultants disputed whether Houston Unlimited was responsible for the presence of the constituents found in excess of state action levels and what, if any, ongoing ecological impact they had and will have on the ranch. Mel Acres' consultant concluded in its report, and reiterated at trial, that the stock tank remained "adversely affected," that the ranch has been "devastated" as a "functioning property," and that Houston Unlimited's conduct has limited the ranch's future use. Houston Unlimited's consultant, by contrast, concluded and testified that water draining from the processing facility did not cause the elevated levels of pH, iron, and aluminum found in the stock tank.

Mel Acres sued Houston Unlimited for nuisance, trespass, and negligence. As damages, it did not seek to recover any remediation costs, but instead sought only a loss of the fair market value of the entire 155-acre ranch. The trial court's charge asked the jury to determine whether

³ Houston Unlimited's consultants tested for the constituents Houston Unlimited identified as used in their processing and the constituents that the Commission had found in its samples.

Houston Unlimited had created a "permanent nuisance," and whether Houston Unlimited had committed a trespass causing "permanent injury." The negligence and damages questions made no reference to any "permanent" conduct, occurrence, injury, or damages. The jury found that Houston Unlimited did not commit trespass causing permanent injury or create a permanent nuisance on the property, but it found Houston Unlimited was negligent and that negligence caused the ranch to lose \$349,312.50 of its market value. The trial court entered judgment on the verdict, and the court of appeals affirmed. We granted review.

II. "Stigma" Damages

To establish its damages in this case, Mel Acres relied on an expert witness who testified that, in her opinion, the ranch had suffered a loss of market value due to stigma resulting from fear, risk, and negative public perceptions. In her opinion, although the contamination from Houston Unlimited's facility had subsided, it had "permanently impacted this market value" and "stigmatized the entire tract," because Mel Acres would have to disclose the history of the contamination in any future sale, and the disclosure would have "a negative effect on the property value, produced by the market's perception of an increased environmental risk due to the contamination." As she put it, when it comes to market value, "[p]erception is everything."

"Stigma damages" essentially constitute "damage to the reputation of the realty." *Smith v. Carbide & Chems. Corp.*, 226 S.W.3d 52, 55 (Ky. 2007). They "represent[] the market's perception of the decrease in property value caused by the injury to the property." Jennifer L. Young, *Stigma Damages: Defining the Appropriate Balance Between Full Compensation and Reasonable Certainty*, 52 S.C. L. REV. 409, 424 (2001). Mel Acres argues that stigma damages continue to exist even after the property has been fully repaired or remediated.

For many years, American courts and commentators have struggled with the issue of

whether and when to allow recovery of stigma damages:

The variety of claims, along with the often uncertain nature of stigma damage, has led to diverse and often confusing jurisprudence. Struggling with the desire to make the plaintiff whole while awarding only those damages that are proven with reasonable certainty, different jurisdictions have fashioned a variety of rules on which to base the award of stigma damages. While most jurisdictions agree that plaintiffs must experience some physical injury to their property before they may recover stigma damages, jurisdictions are divided on whether the injury must be temporary or permanent.

Id. at 409–10 (citations omitted). In addressing these issues, courts have sought to balance the need to acknowledge the actual loss for which the landowner should be compensated against the reality that the loss is based primarily on public perceptions, which can change quickly or, at least, over time. *Id.* at 410.

This Court has never directly addressed the recoverability of stigma damages. Houston Unlimited contends that we should not allow for stigma damages, and if we do we should at least require that the property sustain a permanent and physical injury. *See, e.g., Bradley v. Armstrong Rubber Co.*, 130 F.3d 168, 176 (5th Cir. 1977) ("The requirements of permanent and physical injury to property ensure that this remedy does not open the floodgates of litigation by every property owner who believes that a neighbor's use will injure his property."). Several amici curiae have submitted briefs supporting these arguments.⁴

⁴ The Texas Association of Business, joined by the Texas Chemical Council, for example, argues that allowing for the recovery of lost market value in this case "would have a direct negative impact on various public Brownfield programs that are designed to encourage voluntary remediation and development of parcels," and "many impacted properties [will] otherwise lay abandoned and remain of no value to the public, as well as a continuing threat to human health and the environment." The Texas Pipeline Association argues that we should not allow stigma damages in cases involving environmental contamination because allowing recovery in this case will "subject [the industry] to the whim of any landowner able to secure inherently speculative testimony about the future economic effects of temporary conditions that even a regulatory watchdog agrees are abated." The Texas Oil and Gas Association argues that allowing recovery of lost market value in this case would give "injured landowners the best of both worlds: they can pursue lost market value damages that include both past and future harm while arguing for

Generally, we have permitted landowners to recover *either* the lost value of their land if the injury to the land is permanent *or* the cost to repair or remediate the land if the injury is temporary.⁵ On at least two occasions, we stated that these two remedies are "mutually exclusive," so a landowner can recover lost fair market *or* the cost to repair or restore and loss of use, but not both. *See Schneider Nat'l Carriers, Inc. v. Bates*, 147 S.W.3d 264, 276 (Tex. 2004) ("Because the one claim is included in the other, the two claims are mutually exclusive; a landowner cannot recover both in the same action."); *Kraft v. Langford*, 565 S.W.2d 223, 227 (Tex. 1978) ("The concepts of temporary and permanent injuries are mutually exclusive and damages for both may not be recovered in the same action.").

But we have also acknowledged that, "[i]n Texas, courts have held that an aggrieved consumer may be able to plead, prove and obtain favorable jury findings establishing both costs to repair and permanent reduction in market value notwithstanding such repairs, as cumulative

the right to bring future lawsuits"

⁵ See, e.g., Natural Gas Pipeline Co v. Justiss, 397 S.W.3d 150, 155 (Tex. 2012) (holding in a nuisance case that, "[i]f a nuisance is permanent, a landowner may recover the property's lost market value"); Bayouth v. Lion Oil Co., 671 S.W.2d 867, 868 (Tex. 1984) (holding in suit for injury to land caused by salt water migration from oil leases that "[p]ermanent injuries to land give rise to a cause of action for permanent damages, which are normally measured as the difference in the value of the property before and after the injury" while "[t]emporary injuries give rise to temporary damages, which are the amount of damages that accrued during the continuance of the injury covered by the period for which the action is brought."); Hou. & T.C. R. Co. v. Ellis, 224 S.W. 471, 471 (Tex. 1920) (holding in suit for fire damage to land that "[t]he measure of damages was the difference in the value of the land because of the injury"); Trinity & S. Ry. Co. v. Schofield, 10 S.W. 575, 576-77 (Tex. 1889) (holding in negligence case that "[i]f land is permanently injured by the negligence or wrongful act of another, but the value is not totally destroyed, the owner would be entitled to recover the difference between the actual cash value at the time immediately preceding the injury and the actual cash value immediately after the injury, with legal interest thereon to the time of the trial" but "[i]f land is temporarily but not permanently injured by the negligence or wrongful act of another, the owner would be entitled to recover the amount necessary to repair the injury, and put the land in the condition it was at the time immediately preceding the injury, with interest thereon to the time of the trial."); Galveston, H & S. A. Ry. Co. v. Horne, 9 S.W. 440, 442 (Tex. 1888) (holding in negligence suit for fire damage to land that "when the damage to the land is permanent . . . the difference in its value before and that after the fire is to be calculated"); Fort Worth & D.C. Ry. Co. v. Hogsett, 4 S.W. 365, 366 (Tex. 1887) (stating that it was "well settled" that "the true measure of damages in case of permanent injury to the soil is the difference between the value of the land immediately before the injury and its value immediately after.").

rather than mutually exclusive measures of damage." *Ludt v. McCollum*, 762 S.W.2d 576, 576 (Tex. 1988). To recover "an award of diminished value . . . in addition to the costs of repair," we explained that the "permanent reduction in value" must "refer[] to that reduction occurring even after repairs are made." *Id.* (citing *Terminix Int'l v. Lucci*, 670 S.W.2d 657, 661 (Tex. App.—San Antonio 1984, writ ref'd n.r.e.)). We held that the claimant in *Ludt*, however, could not recover for diminution in market value because he "failed to submit and obtain a jury finding sufficient to establish the permanent reduction in market value *after repairs.*" *Id.* (emphasis added). We acknowledged this rule again in *Parkway Co. v. Woodruff*, in which we explained that "[d]amages for diminution in value and damages for costs of repairs are not always duplicative. Diminution in value does not duplicate the cost of repairs if the diminution is based on a comparison of the original value of the property and the value *after repairs are made.*" 901 S.W.2d 434, 441 (Tex. 1995) (citing *Ludt*, 762 S.W.2d at 576).

Relying on our holdings in *Ludt* and *Parkway*, Texas courts of appeals have also recognized a claimant's right to recover both repair costs and the diminution of value remaining after the repairs were completed. *See, e.g., Contreras v. Bennett*, 361 S.W.3d 174, 181 (Tex. App.—El Paso 2011, no pet.); *Blackstock v. Dudley*, 12 S.W.3d 131, 135 (Tex. App.—Amarillo 1999, no pet.).⁶

⁶ See also Pjetrovic v. Home Depot, 411 S.W.3d 639, 648 n.13 (Tex. App.—Texarkana 2013) (holding that homeowner suing for deceptive trade practices, fraud, negligence, and breach of contract after allegedly defective dishwasher flooded home "may elect to seek damages for the cost of repair, the diminution of value, or even both provided both would not result in double recovery") (citing *Parkway*, 901 S.W.2d at 441); *Royce Homes, L.P. v. Humphrey*, 244 S.W.3d 570, 582 (Tex. App.—Beaumont 2008, pet. denied) (holding homeowner suing for flooding caused by builder of neighbor's house may, "under certain circumstances, . . . recover for both diminution in value and cost of repairs") (citing *Ludt*, 762 S.W.2d at 576); *Perry Homes v. Alwattari*, 33 S.W.3d 376, 386 (Tex. App.—Fort Worth 2000, pet. denied) (holding that "actual damages" recoverable by homeowner suing for deceptive trade practices related to defective foundation "include diminution in market value occurring after repairs") (citing *Ludt*, 762 S.W.2d at 576). Courts of appeals have also acknowledged this rule in cases involving injury to personal property. *E.g., Noteboom v. Farmers Tex. County Mut. Ins. Co.*, 406 S.W.3d 381, 385 (Tex. App.—Fort Worth 2013, no pet.) (citing *Parkway*, 901 S.W.2d at 441); *Gunn Infiniti, Inc. v. O'Byrne*, 963 S.W.2d 787, 796 (Tex. App.—San Antonio 1998) (quoting *Parkway*, 901 S.W.2d at 441), *rev'd on other grounds*, 996 S.W.2d 854 (Tex. 1999).

We acknowledged the rationale underlying this rule in *American Manufacturers Mutual Ins. Co. v. Schaefer*, in which we explained that a "repaired vehicle may command a smaller sum in the market than a like vehicle that has never been damaged, and that awarding [the owner] diminished value in addition to repair would go further to make him whole." 124 S.W.3d 154, 162 (Tex. 2003).

We cannot resolve this apparent conflict in this case, however, nor can we decide whether a loss of market value that remains after restoration of a temporary injury may be based solely on stigma damages. The struggle over whether to even allow recovery of stigma damages arises primarily from the "conflicting goals of fully compensating the plaintiff for her injury while only awarding those damages that can be proven with reasonable certainty." Young, *Stigma Damages: Defining the Appropriate Balance*, 52 S.C. L. REV. at 410–11. Even when it is legally possible to recover stigma damages, it is often legally impossible to prove them. Evidence based on "conjecture, guess or speculation" is inadequate to prove stigma damages, not only as to the amount of the lost value but also as to the portion of that amount caused by the defendant's conduct. *Gray v. Southern Facilities, Inc.*, 183 S.E.2d 438, 444 (S.C. 1971). In this case, even if Texas law permits recovery of stigma damages, Mel Acres' evidence was legally insufficient to prove them.

III. Expert Testimony

Mel Acres attempted to establish its stigma damages through the testimony of its expert witness, Kathy McKinney. McKinney is a licensed real estate appraiser with twenty years' experience in appraising property in Washington County, where the ranch is located. The parties do not dispute her qualifications to offer expert testimony in this case. The sole dispute is whether her testimony is legally competent to support the jury's damages finding.⁷

McKinney testified that she used the "sales-comparison" approach to appraise the ranch's value. She explained that, under this approach, she would look for properties that had the same "highest and best use"⁸ as the appraised property and were similar to the appraised property in location, date of sale, and physical attributes. She would then make adjustments to account for differences between the appraised property and the comparable property, such as their size or location. Using this approach, McKinney determined that the ranch's "unimpaired" value (i.e., its value before the Commission's contamination report) was \$2,329,000, based on a comparison of six recent property sales and three property listings in the area. Houston Unlimited does not contest McKinney's methodology or conclusion as to the ranch's unimpaired market value.

McKinney employed a different process, however, to determine the ranch's "impaired" market value (i.e., its value after the date of the Commission's contamination report). She began by looking for other environmentally contaminated properties, but she could not locate any in Washington County, so she searched the general area around the county and located two properties: the Sebastian site and the Sheridan site.⁹

⁷ The damages question in the jury charge asked: "What is the difference between the market value of the real property owned by Mel Acres . . . before the occurrence in question, and the market value of such property after the occurrence in question?" Accompanying this question was an instruction that "market value" means "the amount that would be paid in cash by a willing buyer who desires to buy, but is not required to buy, to a willing seller who desires to sell, but is under no necessity of selling." The jury answered: \$349,312.50.

⁸ McKinney testified that the highest and best use for Mel Acres' property is "rural recreational and hold for future investment." Houston Unlimited did not dispute this opinion.

⁹ McKinney testified that, in addition to her comparison of these two properties, she also based her opinion of the ranch's "after" value on "the reaction from the people that I talked to, such as the ranchers, the investors, the property owners. I talked to a lot of people." But she did not elaborate on these conversations and made no effort to tie them to her damages calculations.

A. The Sebastian Site

The Sebastian site is a 48-acre tract of land in Grimes County that had previously been part of a larger tract of land owned by International Paper Company. The larger tract of land had been contaminated "a long time ago" and subsequently remediated, but the Sebastian site was not within the contaminated part of the tract. International Paper had sold the site to Herman Sebastian, one of its employees, in 1997. McKinney testified that, although the Sebastian site itself had not been contaminated, it still suffered from "market stigma" because it had been part of a larger tract that had suffered contamination elsewhere, and the stigma attached to the whole property.

Houston Unlimited's damages expert, Rudy Robinson, testified that he had contacted Sebastian, with whom McKinney had not spoken. Sebastian informed Robinson that International Paper sold the property to him as a "sweetheart deal" to compensate him for the early termination of his employment. Sebastian lived on property neighboring the site and had continued to work for International Paper as a contractor, rather than an employee. Because of the "sweetheart" nature of the sale, Robinson testified that the sale was not an arm's-length transaction and thus could not be the basis of a sales comparison. McKinney, by contrast, contended that a "sweetheart deal" could still be an arm's-length transaction.

B. The Sheridan Site

The Sheridan site was part of a 337-acre tract of land in Waller County that had been declared a federal "Superfund site" because of contamination affecting 33 of the acres. The site had been "remediated" by building berms around the 33 acres to contain the contamination within that area. The Sheridan site did not include any of the 33 contaminated acres. McKinney testified that the owner had listed the Sheridan site for sale at a price of \$6,500 per acre, the seller had

received a verbal offer for \$3,849 per acre, and the site was "currently under contract, and according to the agent, [wa]s supposed to close any day," for a price of \$2,900 per acre.

C. The Calculation

McKinney employed a three-step process to reach her opinion on the ranch's lost market value. First, she compared the price that Sebastian paid for his land in 1997 to the sales prices of two uncontaminated but otherwise similar pieces of land that also sold that year. She determined that Sebastian paid "72 to 73 percent less than what other properties were selling for in Grimes County at that time." On this basis, she concluded that the Sebastian site had suffered a 72% diminution in market value, which she attributed to the stigma of the nearby contamination.

Second, McKinney compared the Sheridan site's original asking price of \$6,500 per acre to the \$3,849 per-acre offer. Although McKinney indicated that the owner did not accept this verbal offer, she did not adjust her damages calculation to use the \$2,900 per acre at which the property was "supposed to close any day." Because the \$3,849 verbal offer was 41% less than the original asking price, she concluded that the Sheridan site had lost 41% of its market value, which she attributed to the stigma of the nearby contamination.

Based on these two calculations, McKinney concluded that the ranch had suffered a 60% (\$1,397,500) loss in market value due to "market stigma." She reasoned:

The market reflects a decrease in contaminated property, after remediation, between seventy two percent (72%) and an anticipated forty one percent (41%). In the absence of a test well on the appraised site, it is the considered opinion of the appraiser, appraised property has a diminution in market value of sixty percent (60%) as a result of contamination.

Subtracting the \$1,397,500 loss in market value from the ranch's unimpaired value of \$2,329,000, McKinney calculated the ranch's impaired value to be \$931,500.

IV. Legal Sufficiency of the Damages Evidence

The parties do not dispute that environmental contamination *can* create a stigma that diminishes the market value of land, and Houston Unlimited's expert admitted as much. The issue here, however, is whether Mel Acres submitted legally sufficient evidence that the environmental contamination of the ranch's stock tank *did* diminish the ranch's fair market value and by *how much*. McKinney's testimony is the only evidence on this issue. We must determine whether it is legally competent to support the jury's verdict.

Expert appraisal witnesses are subject to the same relevance and reliability standards that apply to all expert witnesses. *Guadalupe-Blanco River Auth. v. Kraft*, 77 S.W.3d 805, 807 (Tex. 2002). When an expert opinion is admitted into evidence without objection, "it may be considered probative evidence even if the basis for the opinion is unreliable." *City of San Antonio v. Pollock*, 284 S.W.3d 809, 818 (Tex. 2009). "But if no basis for the opinion is offered, or the basis offered provides no support, the opinion is merely a conclusory statement and cannot be considered probative evidence, regardless of whether there is no objection." *Id.* This is because the evidentiary value of expert testimony is derived from its basis, not from the mere fact that the expert has said it. *See, e.g., Natural Gas Pipeline Co. of Am. v. Justiss*, 397 S.W.3d 150, 156 (Tex. 2012); *Pollock*, 284 S.W.3d at 816; *Coastal Transport Co., Inc. v. Crown Cent. Petroleum Corp.*, 136 S.W.3d 227, 232 (Tex. 2004); *Burrow v. Arce*, 997 S.W.2d 229, 235 (Tex. 1999).

A. The Sales-Comparison Approach

The sales-comparison approach that McKinney referred to in her testimony is an accepted, and even favored, means for determining the market value of land. *See City of Harlingen v. Estate of Sharboneau*, 48 S.W.3d 177, 182 (Tex. 2001). Under this approach, "the appraiser finds data for sales of similar property" that are "voluntary," "near in time," "in the vicinity," and "involve

land with similar characteristics." *Id.* The appraiser then uses the prices from the comparison sales, which establish the market value of the similar properties, to determine the market value of the subject property, by adjusting the price upward or downward to account for differences between the properties. *Id.* The sales-comparison approach has most frequently been used to determine the value of land in takings cases. *See id.*¹⁰ In such cases, the value of the land frequently constitutes the amount of the landowner's damages. In a tort case like this one, however, the amount of the landowners' damages depends on other considerations, particularly whether the value of the property changed and whether that change was caused, in whole or part, by the defendant's conduct.

B. McKinney's Approach

McKinney testified that she used a sales-comparison approach to determine Mel Acres' damages. But McKinney's determination of the ranch's impaired market value was not actually based on the sales-comparison approach. *Cf. Kraft*, 77 S.W.3d at 808 ("While using comparable sales to find market value in condemnation proceedings is an approved methodology, Gholson's 'bald assurance' that he was using that widely accepted approach was not sufficient to demonstrate that his opinion was reliable."). She did not look to the sales prices of the Sebastian and Sheridan sites and then determine the ranch's value by adjusting those prices upward or downward to account for differences between the properties. *Cf. Sharboneau*, 48 S.W.3d at 182 (describing the sales-comparison approach). Instead, she first attempted to identify losses in market value that the

¹⁰ The sales-comparison approach has also been used to determine the value of other commodities, such as gas, *see Exxon Corp. v. Middleton*, 613 S.W.2d 240, 246 (Tex. 1981) (using the approach to determine the value of gas in a condemnation proceeding), or to value land in other types of cases, *see Land v. Palo Pinto Appraisal Dist.*, 321 S.W.3d 722, 726 (Tex. App.—Eastland 2010, no pet.) (holding that trial court could rely on sales-comparison approach to determine value of leasehold estates in tax protest and noting that the Tax Code recognized it as an appropriate methodology).

Sheridan and Sebastian sites suffered, calculated as percentages of the unimpaired value, and then opined that the ranch had likewise suffered a similar loss in its proportionate value. She calculated the ranch's impaired value not by comparing it to the values of other similar properties but by reducing its unimpaired value by a percentage based on the diminution percentages she had found for the Sebastian and Sheridan sites.

Although we have found no authorities involving the percentage-reduction approach that McKinney used here, we do not hold that it could never be used to reach a reliable opinion on diminution damages. But the manner in which McKinney used the approach here is fatally flawed for three reasons. First, the data McKinney relied on regarding the Sebastian and Sheridan sites do not support her opinion that those properties lost market value. Second, McKinney's ultimate opinion is cause-dependent—her reasoning can be sound only if the losses she found for the Sebastian and Sheridan sites were, in fact, attributable to market stigma and no other market factors. Yet Mel Acres offered no evidence tending to establish the cause of the Sebastian and Sheridan sites' diminutions in value. Instead, McKinney merely assumed that the diminution in market value she found was (wholly) attributable to the nearby contamination. Third, McKinney failed to account for any differences between the ranch and the Sebastian and Sheridan sites or any differences between the nature of the contamination of the three properties. We conclude that these material shortcomings render McKinney's opinions incompetent to support the judgment.

1. McKinney's Data

This is not a case in which the expert failed to offer any basis for her opinion. McKinney identified the factual basis on which she relied to calculate the loss of the ranch's market value. But the facts on which she relied to calculate the Sheridan site's loss of 41% of its market value do not *actually* support her opinion. Likewise, the facts she relied on to calculate the Sebastian

15

site's loss of 72% of its market value do not *actually* support that opinion. The view that courts should not look beyond an averment by the expert that the data underlying his or her opinion are the type of data on which experts reasonably rely has long been rejected by this Court and others. *Merrell Dow Pharm., Inc. v. Havner*, 953 S.W.2d 706, 713 (Tex. 1997). "The underlying data should be independently evaluated in determining if the opinion itself is reliable," *id.*, and "[i]t is incumbent on an expert to connect the data relied on and his or her opinion and to show how that data is valid support for the opinion reached." *Whirlpool Corp. v. Camacho*, 298 S.W.3d 631, 642 (Tex. 2009).

a. The Sheridan Site

To find a diminution in the Sheridan site's value, McKinney relied on: (1) the owner's original offer to sell the property for \$2,200,000, and (2) a subsequent verbal offer to purchase the property for \$1,300,000. McKinney treated the owner's list price as the property's unimpaired market value and the verbal offer price as the property's impaired market value, and opined that the site suffered a \$900,000 (41%) diminution in value attributable to the nearby contamination. These facts do not support McKinney's opinion for three reasons.

First, the owner's original asking price does not, alone, tend to establish the property's market value at the time of listing. Market value is "what a willing buyer under no compulsion to buy will pay to a willing seller under no compulsion to sell." *Cf. French v. Occidental Permian Ltd.*, — S.W.3d —, — (Tex. June 27, 2014). An original list price is some evidence of what a willing seller will accept, but it is not evidence of what a willing buyer will pay. Sellers may list property at a price above the amount they actually expect to receive or may simply overestimate the property's true market value. Second, the verbal offer price does not, alone, tend to establish the property's market value at the time it was made. A verbal offer is some evidence of what a

willing buyer will pay, but it is not, alone, evidence of what a willing seller will accept. *Cf. French*, — S.W.3d at —. Buyers may offer less than the amount they are actually willing to pay, in hopes of acquiring the property for less than it is worth, or they may simply underestimate the value of the property. As a result, the fact that a verbal offer was made on the Sheridan site for less than the original asking price does not tend to prove that it suffered a diminution in market value.

Third, the difference between the asking price and the offer price does not tend to establish a loss attributable to the nearby contamination because both the asking price and the verbal offer occurred after the land near the Sheridan site was contaminated. McKinney's own report indicates that the contamination dates back to at least 1986, while the listing on which McKinney relied for the site's "unimpaired" value was in 2006. Thus, even if the difference between the original list price and the verbal offer did reflect a diminution in value, the data on which this diminution is based are not temporally connected to the contamination some twenty years earlier. It is possible that the original list price reflected the property's pre-contamination price, but there is no evidence that indicates that was the case. When the facts support several possible conclusions, only some of which support the expert's conclusions, the expert must explain to the fact finder why those conclusions are superior based on verifiable evidence, not simply the expert's opinion. *Jelinek*, 328 S.W.3d at 536.

b. The Sebastian Site

McKinney acknowledged that sales of comparable properties are useful only if they result from an arm's-length transaction, and she did not dispute that the Sebastian sale was a "sweetheart deal" intended to compensate Sebastian for early retirement. The evidence on this issue was uncontroverted. Instead, she argued that the sale *could* constitute an arm's length transaction even though it was a sweetheart deal. She testified, "If it was a sweetheart deal on the part of both parties, it was arm's length." We disagree.

Generally, an arm's-length transaction is one between two unrelated parties with generally equal bargaining power, each acting in its own interest. *See* BLACK'S LAW DICTIONARY 103 (10th ed. 2014) (defining "arm's-length" as "[o]f, relating to, or involving dealings between two parties who are not related or not on close terms and who are presumed to have roughly equal bargaining power; not involving a confidential relationship"); *see also* TEX. TAX CODE ANN. § 171.1012(m) ("In this section, 'arm's length' means the standard of conduct under which entities that are not related parties and that have substantially equal bargaining power, each acting in its own interest, would negotiate or carry out a particular transaction."); TEX. OCC. CODE ANN. § 2307.001(1) ("Arm's length transaction' means the standard of conduct under which two parties having substantially equal bargaining power, each acting in its own interest, would negotiate or carry out a particular transaction.").

Sebastian and International Paper were not entirely unrelated, as they shared an employeremployee (and later, independent contractor) relationship. While an employer and its employee can engage in arm's-length transactions, there is no evidence that occurred here. To the contrary, the only evidence here is that the two parties were not acting solely in their own interests, but instead mutually intended the transaction to be more beneficial to Sebastian. This kind of "sweetheart deal" is not an arm's-length transaction. *See Cherokee Water Co. v. Gregg Cnty. Appraisal Dist.*, 801 S.W.2d 872, 874 (Tex. 1990) ("It is uncontroverted that these are not arm'slength transactions and they have been characterized by the district as 'sweetheart deals.'"); *see also* 389 S.W.3d at 604 (Boyce, J., dissenting) ("This testimony demonstrates that McKinney's opinion is unreliable because she used a sales price produced by a 'sweetheart deal' involving the Sebastian site to bolster her inclusion of the Sheridan Superfund site as a comparable sale."). Thus, the Sebastian site's 1997 sales price did not, alone, constitute evidence of its fair market value at the time of the sale. As a result, the fact that the Sebastian site sold for 72% less than the price paid for two comparable properties does not tend to prove that it suffered a diminution in market value.

2. McKinney's Assumptions

Courts must "rigorously examine the validity of the facts and assumptions on which [expert] testimony is based[.]"*Camacho*, 298 S.W.3d at 637. If an expert's opinion is unreliable because it is "based on assumed facts that vary from the actual facts," the opinion "is not probative evidence." *Id.*; *see also Burroughs Wellcome Co. v. Crye*, 907 S.W.2d 497, 499–500 (Tex. 1995) ("When an expert's opinion is based on assumed facts that vary materially from the actual, undisputed facts, the opinion is without probative value and cannot support a verdict or judgment."). This does not mean that an expert's factual assumptions¹¹ must be uncontested or established as a matter of law. If the evidence conflicts, it is the province of the jury to determine which evidence to credit. *See Cooper Tire & Rubber Co. v. Mendez*, 204 S.W.3d 797, 804 (Tex. 2006). Nor does it mean that parties must prove up every inconsequential assumption on which their expert relies.

But if the record contains no evidence supporting an expert's material factual assumptions, or if such assumptions are contrary to conclusively proven facts, opinion testimony founded on those assumptions is not competent evidence. *See TXI Transp. Co. v. Hughes*, 306 S.W.3d 230, 237–40 (Tex. 2010) (distinguishing expert testimony in case from unsupported assumptions relied

¹¹ We reference here "factual assumptions," meaning assumptions about the facts of the case or the specific data on which the expert relies to reach an opinion in the case. We do not reference the kinds of scientific, mathematical, or other technical assumptions or presumptions that may be regularly and reliably employed in an expert's area of expertise.

on by expert in *Volkswagen*, 159 S.W.3d at 904–06); *Cooper Tire & Rubber*, 204 S.W.3d at 804 ("[I]f an expert's opinion is based on certain assumptions about the facts, we cannot disregard evidence showing those assumptions were unfounded.") (quoting *City of Keller v. Wilson*, 168 S.W.3d 802, 813 (Tex. 2005)); *see also Williams v. Ill.*, 132 S. Ct. 2221, 2241 (2012) ("[I]f the prosecution cannot muster any independent admissible evidence to prove the foundational facts that are essential to the relevance of the expert's testimony, then the expert's testimony cannot be given any weight by the trier of fact."). A contrary approach would allow parties with the burden of proof on a particular fact (such as causation) to avoid the obligation to put forth evidence by simply instructing their expert to assume the fact in forming their opinions.

McKinney's damages opinion rests on several assumptions and leaps of logic. First, she assumes that the diminutions she found for the Sebastian and Sheridan sites were both 100% attributable to contamination that occurred and had been remediated on nearby land. She then reasons that because those two sites suffered diminutions as a result of remediated contamination, the ranch also suffered a diminution as a result of its remediated contamination and the proportionate amount of that diminution will be more than that suffered by the Sheridan site and less than that suffered by the Sebastian site.

Even if we accept that the Sebastian and Sheridan sites suffered diminutions in their market value, those diminutions are relevant here only if they were attributable to the remediated contamination. But McKinney did not attempt to establish that the remediated contamination near the Sebastian and Sheridan sites caused some or all of the diminution in market value she found, nor did she attempt to rule out other plausible causes. *Cf. Wal-Mart Stores, Inc. v. Merrell*, 313 S.W.3d 837, 840 (Tex. 2010) ("An expert's failure to explain or adequately disprove alternative theories of causation makes his or her own theory speculative and conclusory."); *General Motors*

Corp. v. Iracheta, 161 S.W.3d 462, 470 (Tex. 2005) ("[The expert] eliminated the obvious possibility that fuel or vapors from the tank filler neck ignited only by saying so, offering no other basis for his opinion. Such a bare opinion was not enough."). Instead, McKinney simply assumed that 100% of the asserted diminution in value in both sites was attributable to the remediated contamination. This kind of material assumption, entirely lacking evidentiary support, renders expert opinion testimony unreliable and incompetent to support a judgment. *See TXI Transp.*, 306 S.W.3d at 239–40 (discussing the *Volkswagen* expert's "assumption that the detached wheel remained pocketed in the wheel well throughout a turbulent and high-speed accident sequence," which he failed to "connect his theory to any physical evidence in the case or to any tests or calculations prepared to substantiate his theory"); *see also Sage Street Assocs. v. Northdale Constr. Co.*, 863 S.W.2d 438, 449 (Tex. 1993) (observing that an expert's assumptions do not constitute evidence).

McKinney seems to have operated under the assumption that all remediated property will suffer market stigma. While the parties agreed that environmental contamination can result in a diminution in property value that remains even after the contamination is remediated, the parties did not agree, and there was no evidence indicating, that this is always the case. Absent such evidence, we cannot assume, without evidence, that *any* (much less all) of the diminution McKinney found for the Sebastian and Sheridan sites was attributable to market stigma. And even if there were such evidence or evidence that contaminated properties always retain some diminution in market value even after remediation, Mel Acres offered no evidence tending to show that *all* of the Sebastian and Sheridan sites' alleged diminutions in value were attributable to stigma or to apportion such diminution among stigma and other possible causes.

The evidence here, in fact, indicates other potential causes of the "diminution" McKinney found. With respect to the Sheridan site, the difference between the original list price and the verbal offer price may reflect the difference between what the seller hoped to get and what a buyer hoped to pay rather than any actual change in the property's market value. And if there was a change in the property's market value, because both the original listing (the "unimpaired" market value) and the verbal offer (the "impaired" market value") occurred after the contamination and its remediation, the impairment of the property's market value cannot, without more, be attributed to the contamination. With respect to the Sebastian site, the only evidence indicates that the difference between its sale price and two other comparable sales prices simply reflected the "sweetheart" nature of the deal.

The record does not conclusively establish any of these alternative plausible causes as the actual cause. But Mel Acres offered no evidence tending to establish that the asserted diminutions were attributable, in whole or in part, to the contamination near the Sheridan and Sebastian properties. Absent any evidentiary basis, McKinney's material assumptions that the diminutions she found were caused by contamination-related stigma that remained after remediation of the property are unsupported and render her opinion incompetent and no evidence. *Cf. Wal-Mart Stores*, 313 S.W.3d at 839–40 (holding that expert's causation opinion lacked evidentiary value when factual basis for opinion was equally consistent with alternative cause); *Volkswagen of Am., Inc. v. Ramirez*, 159 S.W.3d 897, 911 (Tex. 2004) (noting that expert's causation opinion was based on facts that were "just as consistent with" the expert's opinion of what happened as they were with an alternative course of events).

3. McKinney's Analytical Gaps

Even assuming that the Sebastian site suffered a 72% diminution in value and the Sheridan site suffered a 41% diminution in value, and that the remediated contamination of nearby property caused those losses, McKinney did not show how that data offers valid support for her conclusion that Mel Acres' ranch lost 60% (\$1,397,500) of its value or that stigma resulting from Houston Unlimited's conduct caused that loss.

Expert testimony is unreliable if "there is simply too great an analytical gap between the data [relied upon] and the opinion proffered." *Gammill v. Jack Williams Chevrolet, Inc.*, 972 S.W.2d 713, 726 (Tex. 1998) (quoting *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997)). An expert must "connect the data relied on and his or her opinion" and "show how that data is valid support for the opinion reached." *Camacho*, 298 S.W.3d at 642 (citing *Pollock*, 284 S.W.3d at 819–20; *Volkswagen*, 159 S.W.3d at 906; *Gammill*, 972 S.W.2d at 726). "We are not required . . . to ignore fatal gaps in an expert's analysis or assertions that are simply incorrect." *Volkswagen*, 159 S.W.3d at 912; *Cooper Tire & Rubber*, 204 S.W.3d at 800–01. "A flaw in the expert's reasoning from the data may render reliance on a study unreasonable and render the inferences drawn therefrom dubious. Under that circumstance, the expert's scientific testimony is unreliable and, legally, no evidence." *Havner*, 953 S.W.2d at 714.

The foundation of the sales-comparison approach is that the appraised property is compared to comparable properties, which justifies an assumption of comparable values, and then adjusted for differences between the properties. *See Sharboneau*, 48 S.W.3d at 182–83. McKinney's approach lacks this foundation. McKinney did not testify that the Sheridan or Sebastian sites were comparable to Mel Acres' property in any aspect other than environmental contamination of some kind that had been remediated.¹² To the contrary, she testified that the properties did not need to be comparable under her approach because she calculated the lost value as a percentage.

When Mel Acres' attorney asked McKinney if there are "any similarities between Grimes County," where the Sebastian site is located, "and Washington County," where the ranch is located, that "make this a good comp," McKinney responded, "What makes this a good comp is the fact that it is a contamination. There are differences in land value between Washington County and Grimes County, and that's why we want to take percentages." Later, Houston Unlimited's attorney followed up:

- Q. [O]bviously, to make your analysis accurate, you want both your impaired and your unimpaired properties to be as comparable as possible to the property that's the subject of your appraisal, right?
- A. It doesn't necessarily the unimpaired do the impaired and the unimpaired do not they have to have a similar highest and best use.
- Q. Right.
- A. But what you're looking for is a percentage. So no, they don't have to be.
- Q. They don't have to be comparable?
- A. No.

We have explained, however, that "[t]he comparable sales method fails when the comparison is made to sales that are not, in fact, comparable to the land condemned." *Kraft*, 77 S.W.3d at 808.

Nor did McKinney make adjustments for differences between the ranch and the Sebastian and Sheridan sites. McKinney did not explain whether or why the ranch and the contamination of the stock tank were similar to, or different from, the Sebastian or Sheridan properties and their

¹² As noted below, there was some dispute over whether the Sheridan site had been fully remediated.

contamination in any way that would make it likely to suffer a greater or lesser diminution than either of the other two properties. She did not identify plausible causes for variations in the diminutions and explain how those causes did or did not impact her calculation for the ranch. Although she chose a percentage of loss that was less than the Sheridan site's percentage and more than the Sebastian site's, she did not in any way tie that number to differences between the properties. To the contrary, the record contains no analysis of how McKinney reached the 60% loss for the ranch. The record reveals only that 60% falls somewhere between 41% and 72%, a little above the average of the two (56.5%).

McKinney's failure to account for significant differences between the kind and degree of contamination that the three properties sustained or the nature of the remediation is also significant in the context of this record. The Sheridan site had been part of a federal Superfund site that required extensive remediation. Houston Unlimited presented evidence that the federal government monitored the Sheridan site and placed it on a "national priority list." Robinson explained that the Sheridan site was monitored for thirty years at a cost of \$16–17 million, and some constituents at that site were "off the Richter scale when compared to regulatory limits." 389 S.W.3d 583, 599. There was also evidence that the Sheridan site had not been fully remediated and "still contains over 44,000 cubic yards of sludge and contaminated soil."¹³

The metal compounds found at the ranch, by comparison, did not greatly exceed state action levels, and the only remediation the parties have identified are the measures Houston

¹³ In her deposition, McKinney agreed that the market would react "in varying degrees" to properties contaminated by different chemicals, depending on the nature of the chemicals, if the contamination had not been remediated.

Unlimited took on its own property to prevent constituents from continuing to migrate onto the ranch. The metal compounds appear to have naturally dissipated after the migration ceased.

Finally, McKinney did not account for contamination that was not attributable to Houston Unlimited's conduct. For example, Mel Acres' own evidence showed iron in excess of state action levels on the ranch, yet there was no evidence linking iron contamination to Houston Unlimited. To the contrary, there was some evidence that other ponds on the ranch, which were beyond the reach of any discharge from Houston Unlimited's facility, also tested positive for excessive iron levels. McKinney testified that she did not attempt to attribute any portion of the diminution in value she had calculated to any actions of Houston Unlimited and made no attempt to calculate the amount of the diminution in value that resulted from activities not related to Houston Unlimited. Nor did any other evidence address this issue.

McKinney's failure to account for differences between the three properties at issue, differences between the nature of the contamination and remediation of the properties, and contamination not attributable to Houston Unlimited, leaves analytical gaps in her reasoning. At least once Houston Unlimited raised these gaps in questioning her, it was necessary for McKinney to provide some logically valid explanation for why she did not need to consider these factors that, facially, appear relevant to her opinion. The only explanation she provided was that differences between the three properties did not matter because she found a "very similar decrease in market value" for the Sebastian and Sheridan sites. But 72% and 41% are not "very similar decrease[s] in market value."¹⁴

¹⁴ McKinney's calculation of the ranch's decrease in market value was based on the Sebastian and Sheridan sites' decreases, so any similarity between Mel Acres' decrease and the other two is a necessary product of her approach, not independent evidence of any facts.

C. Summary

As we have noted, the parties do not dispute that McKinney is well-qualified to testify as an expert on market value, and we do not doubt that she had difficulty finding other contaminated properties in the general area to compare to Mel Acres' ranch. We recognize that there may be instances in which sufficiently similar properties are not available for comparison, and we have held that comparable sales need not always be in the immediate vicinity of the subject land, so long as they are sufficiently similar to permit a reliable comparison. *Kraft*, 77 S.W.3d at 808 (citing *City of Austin v. Cannizzo*, 153 Tex. 324, 267 S.W.2d 808, 815 (1954)). We have also held that similar does not mean the same, and that differences between the subject property and the comparison properties are acceptable so long as the appraiser is able to adequately account for the differences through price adjustments. *See Sharboneau*, 48 S.W.3d at 182–83. "But if the comparison is so attenuated that the appraiser and the fact-finder cannot make valid adjustments for these differences, a court should refuse to admit the sale as comparable." *Id.* at 182.

We do not hold here that the dissimilarities between the ranch and the Sebastian and Sheridan sites are so great that they could not be accounted for through valid adjustments. McKinney simply did not make or explain any such adjustments. Nor did she otherwise adhere to the sales-comparison approach. As noted above, the sales-comparison analysis has two fundamental considerations: the comparison and accounting for differences. *See id.* at 182–83. McKinney did neither in her reliance on the Sebastian and Sheridan sites. Without that or some other reliable foundation, her opinions cannot constitute evidence sufficient to support the award of damages in this case. *See Justiss*, 397 S.W.3d at 161 (holding that landowner's opinion testimony was conclusory and no evidence even though he demonstrated that he was familiar with market values in the area because he failed to explain the factual basis behind his determination of

the diminution in property value to which he opined); *Mack Trucks, Inc. v. Tamez*, 206 S.W.3d 572, 581 (Tex. 2006) (noting that expert "did no more than set out 'factors' and 'facts' which were consistent with his opinions," then state his conclusion, but the reliability inquiry "does not ask whether the expert's conclusions appear to be correct; it asks whether the methodology and analysis used to reach those conclusions is reliable."); *Gammill*, 972 S.W.2d at 727 (observing that the analytical gap in the expert's analysis "was his failure to show how his observations, assuming they were valid, supported his conclusions that [the passenger] was wearing her seat belt or that it was defective.").

Finally, we acknowledge that the jury in this case apparently found McKinney's testimony to be sufficient, and we do not lightly reject their judgment. Juries are vital to our legal system, in part because they enter the courtroom with valuable real-world experience. Outside of courtrooms, it is not unreasonable to accept an expert's opinions even when the expert offers no facts to support those opinions. But the law requires experts to substantiate their opinions, and for good reasons. Experts who testify on behalf of parties to a lawsuit are subject to biases and potential abuses that are not always present outside the courtroom, and the courtroom itself may afford experts a veneer of credibility not present in other contexts. Legal sufficiency review requires courts to ensure that a jury that relies on an expert's opinion has heard factual evidence that demonstrates that the opinion is not conclusory on its face. See Volkswagen, 159 S.W.3d at 912 ("While juries are important to our legal system, they cannot credit as some evidence expert opinions that are not reliable or are conclusory on their face. These principles are consistent with a legal sufficiency review."). Here, McKinney's reliance on insufficient data and unsupported assumptions and the analytical gaps in her analysis render her opinion conclusory and without evidentiary value. See McIntyre v. Ramirez, 109 S.W.3d 741, 749-50 (Tex. 2003) (observing that conclusory expert

testimony "is insufficient to create a question of fact"). Because Mel Acres offered no other evidence of the ranch's lost market value or its cause, we must conclude that the evidence is legally insufficient to support the damages awarded in this case.

III. Conclusion

We hold that Mel Acres failed to present legally sufficient evidence to support its damages. We therefore reverse the court of appeals' judgment and render a take-nothing judgment in favor of Houston Unlimited.

> Jeffrey S. Boyd Justice

Opinion delivered: August 22, 2014