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In the
Indiana Supreme Court



No. 20S04-1404-CR-243

JOSEPH K. BUELNA,

Appellant (Defendant),

v.

STATE OF INDIANA,

Appellee (Plaintiff).

Appeal from the Elkhart Superior Court, No. 20D03-0810-FA-52
The Honorable Thomas L. Ryan, Senior Judge

On Petition to Transfer from the Indiana Court of Appeals, No. 20A04-1305-CR-223

November 13, 2014

Rush, Chief Justice.

The severity of a methamphetamine manufacturing offense depends on the weight of “pure or adulterated” drug the defendant manufactures. But the term “adulterated” is ambiguous in the context of the manufacturing process, which has led to divergent interpretations of how to define, and consequently how to weigh, “adulterated” methamphetamine. We construe “adulterated” methamphetamine as a final product, not the total weight of an intermediate mixture still undergoing reaction. This interpretation derives from our precedent discussing “adulterated” drugs, practical considerations about the manufacturing process, the structure of the methamphetamine statute, and

the rule of lenity. Accordingly, when the State seeks to establish the weight of manufactured methamphetamine based on an intermediate mixture that contains methamphetamine, it must demonstrate how much final product that mixture would have yielded had the defendant finished the manufacturing process.

Here, the State presented no such evidence and thus may not use the intermediate mixture to establish the three-gram weight enhancement for Class A felony manufacturing methamphetamine. Yet, the record shows that Defendant manufactured additional final product that exceeded the three-gram threshold. On the basis of that additional final product, we find the evidence sufficient to sustain Defendant's conviction.

Facts and Procedural History

Phillip Miller owned a house in Elkhart, Indiana. Its garage needed repair, so Miller hired Nathan Slabach, a contractor. Slabach, in turn, hired the Defendant, Joseph Buelna, as a subcontractor to help him. During the time the two men worked on the garage, they often manufactured and smoked methamphetamine in Miller's attic.

On October 13, 2008, Buelna and Slabach spent part of the day "cooking dope." Their friend Kammi Pantoja arrived at Miller's house sometime during the process to smoke methamphetamine with them and saw them manufacturing methamphetamine together. Later that day, Slabach pulled "all the dope completely off" of three bottles that were used as reaction vessels. Slabach testified he "pulled a couple of grams out of each bottle," for a total of approximately six grams, and left at most a quarter gram remaining in each bottle.

That same evening, Elkhart police responded to an anonymous complaint about a possible methamphetamine laboratory at Miller's house. From the curb, the officers smelled an ammonia-tinged chemical odor associated with methamphetamine manufacturing. Their investigation led them to a ladder extending to a second-story attic window covered by a blue tarp. As one of the officers ascended, the chemical fumes grew so intense they caused his eyes to water and made it difficult to breathe. When the officer pulled back the tarp, he saw Buelna sitting in the attic. Meanwhile, another officer who had also climbed the ladder surveyed the attic and saw methamphetamine precursors and tools used to manufacture methamphetamine: a pot, eight spent reaction vessels, pseudoephedrine pills, several hydrochloric acid generators, lithium batteries, cold packs, salt, a coffee grinder,

and coffee filters. He also observed a bottle bubbling in the middle of the attic floor—a classic indicator of an active one-pot lab whose contents were still undergoing a chemical reaction.

In addition to the bubbling reaction vessel on the attic floor, the officers recovered two other active reaction vessels—vessels containing precursors still undergoing a chemical reaction. One of these two vessels tested positive for ephedrine or pseudoephedrine, a key component in methamphetamine manufacturing. The other, a plastic fruit-juice bottle, was one-half to three-quarters full of “sludge,” with an inch of liquid solvent floating on top. A sample of this liquid—weighing approximately thirteen grams—tested positive for liquid methamphetamine.

The State charged Buelna with Class A felony manufacturing methamphetamine—enhanced from a Class B felony because at least three grams of the drug were at issue—and Class B felony burglary. The State relied heavily upon the thirteen-gram liquid solvent that contained methamphetamine to support the three-gram weight enhancement. After a two-day trial, a jury found Buelna guilty of the A-felony methamphetamine offense, but not guilty of the burglary charge. He was sentenced to fifty years, with thirty executed and twenty suspended. In a memorandum decision, the Court of Appeals rejected Buelna’s argument that the evidence was insufficient to support the three-gram weight enhancement. Buelna v. State, No. 20A04-1305-CR-223 (Ind. Ct. App. Jan. 30, 2014). The court reasoned that because the liquid sample taken from the fruit-juice bottle contained some “final product,” the entire mixture constituted “adulterated” methamphetamine, and its entire thirteen-gram weight counted to satisfy the three-gram enhancement.

We granted transfer to address Buelna’s argument that the evidence is insufficient to establish the three-gram weight enhancement because the thirteen-gram liquid mixture relied upon by the State to enhance his conviction is not “adulterated” methamphetamine. Ind. Appellate Rule 58(A). We consider three issues to resolve Buelna’s case: (1) what is “adulterated” methamphetamine; (2) what does that definition imply about weighing manufactured methamphetamine, particularly in cases where the manufacturing process is incomplete; and (3) is there sufficient evidence to show Buelna manufactured at least three grams of methamphetamine?

Standard of Review

The meaning of the statutory term “adulterated” methamphetamine and its implications for establishing the weight enhancement are pure questions of law that we review *de novo*. N.L. v. State,

989 N.E.2d 773, 777 (Ind. 2013). Once we have resolved these statutory issues, we are in a position to decide whether the evidence presented by the State in this case is sufficient to establish Buelna's weight enhancement beyond a reasonable doubt. When we review the sufficiency of the evidence to support a criminal conviction, we consider only the probative evidence and reasonable inferences supporting the verdict. Jones v. State, 783 N.E.2d 1132, 1139 (Ind. 2003). We neither reweigh the evidence nor assess witness credibility. Drane v. State, 867 N.E.2d 144, 146 (Ind. 2007). And unless no reasonable fact-finder could conclude the elements of the crime were proven beyond a reasonable doubt, we will affirm the conviction. Id. That is, we will hold the evidence sufficient "if an inference may reasonably be drawn from it to support the verdict." Id. at 147 (quoting Pickens v. State, 751 N.E.2d 331, 334 (Ind. Ct. App. 2001)) (internal quotation marks omitted).

Discussion

"A person who knowingly or intentionally manufactures . . . methamphetamine, pure or adulterated . . . commits dealing in methamphetamine, a Class B felony." Ind. Code § 35-48-4-1.1(a) (2008). The crime is enhanced to "a Class A felony if the amount of the drug involved weighs three (3) grams or more." I.C. § 35-48-4-1.1(b). "Manufacture" includes either "production [or] preparation . . . of a controlled substance." I.C. § 35-48-1-18(1). Accordingly, Indiana courts have consistently held that the manufacturing process need not be complete to violate the manufacturing statute. Caron v. State, 824 N.E.2d 745, 754 n.7 (Ind. Ct. App. 2005), trans. denied; Traylor v. State, 817 N.E.2d 611, 619 (Ind. Ct. App. 2004), trans. denied; Bush v. State, 772 N.E.2d 1020, 1023 (Ind. Ct. App. 2002), trans. denied.

While the statute criminalizes the "preparation" of methamphetamine, it does not specify how courts should weigh an intermediate mixture that a manufacturer is caught preparing. The entire mixture certainly cannot be weighed as "pure" methamphetamine. And the statute is ambiguous on whether that mixture is "adulterated" methamphetamine. Several panels of the Court of Appeals, including the one in this case, have struggled to resolve this ambiguity and construed the term "adulterated" to include an intermediate mixture that contains methamphetamine. See Hundley v. State, 951 N.E.2d 575, 581 (Ind. Ct. App. 2011), trans. denied; Traylor, 817 N.E.2d at 619–20. But that approach is not without disagreement. Harmon v. State, 971 N.E.2d 674, 683 (Ind. Ct. App. 2012) (Vaidik, J., concurring in result), trans. denied.

Resolving this ambiguity here is even more critical in light of the General Assembly’s recent overhaul of Indiana’s criminal code. The revised methamphetamine statute now defines a four-tier offense progressively enhanced by several weight increments, not just a two-tiered offense with a single three-gram threshold.¹ However, the key language—“pure or adulterated”—remains the same.

After careful consideration, we hold that “adulterated” methamphetamine is the final, extracted product that may contain lingering impurities or has been subsequently debased or diluted by a foreign substance—not an intermediate mixture that has not undergone the entire manufacturing process. Thus, the weight of an intermediate mixture is probative of the weight enhancement only if the State presents evidence that establishes how much finished drug the intermediate mixture would have yielded if the manufacturing process had been completed. In this case, the thirteen-gram sample of the intermediate liquid mixture taken from one of Buelna’s reaction vessels falls outside the definition of “adulterated” methamphetamine, and no evidence of the mixture’s final yield was presented. Nevertheless, co-manufacturer Slabach’s testimony establishes that Buelna manufactured six grams of final product in addition to the thirteen-gram intermediate sample at issue here, and we affirm Buelna’s conviction on that basis. On all other issues, we summarily affirm the Court of Appeals decision. App. R. 58(A)(2).

I. “Adulterated” Methamphetamine Is a Final, Extracted Product That Contains Lingering Impurities or Has Been Subsequently Debased by a Foreign Substance.

In construing the term “adulterated,” we apply rules of statutory construction to identify legislative intent that is not otherwise clear from the term’s plain meaning. *See Adams v. State*, 960 N.E.2d 793, 798 (Ind. 2012). We read statutes as a whole—avoiding an interpretation that makes any part of the statute superfluous. *City of Carmel v. Steele*, 865 N.E.2d 612, 618 (Ind. 2007). We also presume the legislature intended a logical and not an absurd application of the language used in the statute. *Pabey v. Pastrick*, 816 N.E.2d 1138, 1148 (Ind. 2004). When interpreting statutes defining drug offenses, we will construe the statute to “encompass[] the common understanding of those in the drug trade.” *See Riley v. State*, 711 N.E.2d 489, 493 (Ind. 1999). And when interpreting

¹ Under the revised code, a person who manufactures less than one gram commits a Level 5 felony; more than one gram but less than five grams a Level 4 felony; more than five grams but less than ten grams a Level 3 felony; and more than ten grams a Level 2 felony. I.C. § 35-48-4-1.1 (West Supp. 2014).

criminal statutes, we apply the rule of lenity and construe ambiguous statutes against the State and in favor of the defendant, if possible. Adams, 960 N.E.2d at 798.

For over thirty years, we have held that the General Assembly’s references to other “adulterated” drugs means the total weight of the delivered product, consistent with the meaning common in drug trafficking. Lawhorn v. State, 452 N.E.2d 915, 917 (Ind. 1983) (adulterated cocaine); Tobias v. State, 479 N.E.2d 508, 511 (Ind. 1985) (prescription narcotic in pill form); Woodson v. State, 501 N.E.2d 409, 411 (Ind. 1986) (adulterated heroin). In each of these cases, the delivered product, though adulterated, was nonetheless ready for consumption—that is, a final product—at the time of delivery. We see no reason “adulterated” methamphetamine should have a different meaning than “adulterated” cocaine under Lawhorn, prescription narcotic pills under Tobias, or heroin under Woodson.

Of those three cases, our discussion of “adulterated” in Tobias, 479 N.E.2d at 511, may be the most helpful in this context. There, we found sufficient evidence to support the three-gram weight enhancement for defendant’s conviction of dealing in a narcotic drug, rejecting the defendant’s argument that “only the pure and unadulterated portion” of the seized drug could be used for proving the drug’s weight. Id. Instead, we held that the “total weight of the delivered drug and not its pure component” should be considered. Id. (citing Lawhorn, 452 N.E.2d 915). Tobias is certainly not identical to this case because we were interpreting a statute that covered only “cocaine or a narcotic drug, pure or adulterated,” see I.C. § 35-48-4-1 (Burns 1985), and our Legislature had yet to pass a separate, stand-alone methamphetamine statute. And Tobias and the cases on which it relied all involved “dealing in,” not “manufacturing” a drug or controlled substance. 479 N.E.2d at 509; Lawhorn, 452 N.E.2d at 916. Still, the defendant in each case was convicted for delivering a *final* product that had lingering impurities or had been subsequently “cut” with a foreign substance. See Tobias, 479 N.E.2d at 509, 511; Lawhorn, 452 N.E.2d at 917.² Nothing about the language or

² See also Riley, 711 N.E.2d at 493 (holding entire contents of packages sold by defendant that tested positive for cocaine were properly included in total weight of the drug); Norwood v. State, 670 N.E.2d 32, 37 (Ind. Ct. App. 1996) (defining pure cocaine that had been subsequently mixed with water as “adulterated”); Evans v. State, 566 N.E.2d 1037, 1039, 1041–42 (Ind. Ct. App. 1991) (defining “adulterated” cocaine to include “several chunks of a greyish white or brownish white material” even though only one of those “chunks” was tested and found to contain “in excess of ninety percent cocaine”); Clark v. State, 539 N.E.2d 9, 12 (Ind. 1989) (holding “inert materials mixed with the cocaine” were properly included in the total weight of the drug). Cf. Adams v. State, 968 N.E.2d 281, 286 (Ind. Ct. App. 2012) (defining “adulterated” marijuana as marijuana that includes other vegetable material), trans. denied.

structure of the now-separate methamphetamine statute suggests the Legislature intended “adulterated” to have a different meaning. Compare I.C. § 35-48-4-1 (Burns 1985), with I.C. § 35-48-4-1.1 (2008). Thus, our decision today maintains the longstanding definition of “adulterated” as that term has been applied over the past several decades.

Our interpretation also “encompasses the common understanding of those in the drug trade.” Riley, 711 N.E.2d at 493. Manufacturers generally do not finish the manufacturing process by leaving liquid methamphetamine mixed with organic solvent. The State admitted at oral argument that it was “certainly not advisable to consume” the solvent that contained the methamphetamine, even though one skilled witness testified at trial that it was “I guess, possible” to do so. But even that skilled witness testified that the mixture was “not usable meth.”

Realistically, manufacturers extract the methamphetamine from the solvent into a consumable form by “crashing out” or “salting the dope.” See Harmon, 971 N.E.2d at 677 n.2. This process of extracting methamphetamine into its “usable” form was explained at length during Buelna’s trial:

[O]nce they have completed the meth cook itself, the methamphetamine is now in the organic solvent. They have to remove that methamphetamine from the organic solvent in order to get the actual powder form, or the usable form. So what they will do is they call it crashing out or salting the dope. . . . And what they do is they will add liquid drain cleaner or sul[f]uric acid of some type. . . . They combine that with salt, and usually we see it—and you’ll hear a term . . . “HCL generator.” . . . An HCL generator is the final step in order to finish out the methamphetamine. They’re combining the sulfuric acid with the salt[, which] . . . produces hydrochloric gas. . . . Once they’ve got it going it will bubble the gas . . . into the organic solvent[, and] . . . the dope will actually start falling out of the liquid . . . to the bottom of the container. . . . And then the final part is they will . . . strain that liquid straight through a coffee filter and as it strains through it catches all the . . . pure meth powder.

(Tr. 611–12). This lengthy description illustrates that manufacturing methamphetamine is a complicated, multi-step process. The precursors used to transform ephedrine or pseudoephedrine into methamphetamine do not “adulterate” the final product, they create it. This is why the criminal code refers to these substances as “chemical reagents or precursors,” not “adulterants.” See I.C. § 35-48-4-14.5(a). To construe “adulterated” methamphetamine to include all of these precursors misunderstands how manufacturers actually manufacture, and subsequently adulterate, their product.

Caffeine, ephedrine, sugars, dimethyl sulphone (MSM), niacinamide, and even sidewalk chalk are some of the most common adulterants found in methamphetamine, not intermediate mixtures.³ And any impurities that may linger in the final product have still made it through the manufacturing process, and may include residual substances, byproducts of the manufacturing process, or the co-ingredients to the crushed cold medicines from which manufacturers extract ephedrine or pseudoephedrine.⁴ Just like eggs, flour, and sugar baking in an oven do not adulterate a cake, precursors bubbling in a bottle do not adulterate methamphetamine. Interpreting “adulterated” methamphetamine to encompass an intermediate product misconstrues the realities of the manufacturing process.

Additionally, overlooking the realities of the manufacturing process and construing “adulterated” methamphetamine as an intermediate mixture would make it nearly impossible for defendants to manufacture *less* than three grams. This would effectively eviscerate Class B felony manufacturing methamphetamine, which has no weight element. In the manufacturing statute, the three-gram threshold is all that separates the A felony and B felony charge for dealing in methamphetamine. If we were to hold that the term “adulterated” encompassed the entire weight of an intermediate mixture that contained methamphetamine, such a mixture would almost never weigh less than three grams. For example, the thirteen-gram liquid sample relied upon by the Court of Appeals was only a sample taken from a larger quantity of solvent found in one of Buelna’s reaction vessels. We do not believe the General Assembly intended to write a statute that made virtually every instance of methamphetamine manufacture a Class A felony.⁵ See Steele, 865 N.E.2d at 618.

³ Sanggil Choe, et al., Analysis of Pharmaceutical Impurities in the Methamphetamine Crystals Seized for Drug Trafficking in Korea, 227 *Forensic Sci. Int’l* 48 (2013); Claire Cole, et al., Cut: A Guide to Adulterants, Bulking Agents and Other Contaminants Found in Illicit Drugs 12, 32 (April 2010); Steffanie A. Strathdee, et al., The Color of Meth: Is It Related to Adverse Health Outcomes? An Exploratory Study in Tijuana, Mexico, 17 *Am. J. on Addictions* 111, 114 (2008); Beom Jun Ko, et al., The Impurity Characteristics of Methamphetamine Synthesized by Emde and Nagai Method, 170 *Forensic Sci. Int’l* 142, 146 (2007); Eric C. Person, et al., Structural Determination of the Principal Byproduct of the Lithium-Ammonia Reduction Method of Methamphetamine Manufacture, 50 *J. Forensic Sci.* 87 (Jan. 2005); K.L. Windahl, et al., Investigation of the Impurities Found in Methamphetamine Synthesized from Pseudoephedrine by Reduction with Hydriodic Acid and Red Phosphorus, 76 *Forensic Sci. Int’l* 97 (1995).

⁴ Supra note 3.

⁵ Under the new sentencing scheme, the weight of Buelna’s thirteen-gram intermediate mixture would have triggered a Level 2 felony—the most severe penalty for manufacturing methamphetamine, with an advisory sentence of seventeen and one-half years. I.C. § 35-50-2-4.5 (West Supp. 2014).

Interpreting “adulterated” methamphetamine as a final product also avoids “unjust or absurd results.” State v. Evans, 810 N.E.2d 335, 337 (Ind. 2004) (quoting Bolin v. Wingert, 764 N.E.2d 201, 204 (Ind. 2002)). Consider a hypothetical scenario involving the arrest and conviction of two methamphetamine manufacturers. Both combine the same amount of precursors under identical conditions, and both intend to yield two grams of “pure” drug. But one defendant is arrested before he can separate his final product from the intermediate mixture—at which point the unseparated, unfinished mixture weighs well over three grams. The other defendant is detained only after he has filtered the methamphetamine from the mixture—approximately two grams’ worth. Under the definition of “adulterated” adopted by the Court of Appeals, the first defendant would receive a conviction for Class A felony manufacturing methamphetamine with an advisory sentence of thirty years, but the second would face only a Class B felony with an advisory sentence of ten years. I.C. § 35-50-2-4. A potential two-decade discrepancy should reflect a defendant’s criminal intent and actions, not the happenstance of when police find the lab. But this “unjust and absurd” discrepancy is precisely what will occur if we do not construe “adulterated” methamphetamine as a final product.

The State finds support for its definition of “adulterated” methamphetamine in Hundley, where the Court of Appeals held that where “the intermediate step is so near the end of the manufacturing process that the final product is present in the chemical compound, that substance qualifies as an ‘adulterated drug.’” 951 N.E.2d at 581. The Court of Appeals reached this conclusion by adopting a broad definition of “adulterated drug,” which is a “‘drug that does not have the strength, quality, or purity represented or expected,’” id. at 582 (quoting Black’s Law Dictionary 513 (7th ed. 1999)), and rejecting a narrower definition of “adulterated”: “[t]o debase or make impure by adding a foreign or inferior substance,” id. (quoting Black’s Law Dictionary 52 (7th ed.1999)). But applying the broader definition contravenes the rule of lenity’s mandate to “construe an ambiguous statute in favor of the defendant.” Adams, 960 N.E.2d at 798. For this reason as well, we must restrict the term “adulterated” to a final product with lingering impurities or subsequently added adulterants.

In sum, we hold that the term “adulterated” does not mean an intermediate liquid mixture that has yet to undergo the entire manufacturing process—just like cake batter is not a cake until it’s done baking. Instead, “adulterated” describes methamphetamine in its final, extracted form that contains lingering impurities or has been diluted or cut with a foreign substance. The State therefore may not rely upon the entire weight of the thirteen-gram sample taken from one of Buelna’s reaction vessels to support his conviction for manufacturing more than three grams of methamphetamine.

II. Proving the Weight of Unfinished Product Requires Evidence of Final Yield.

The weight of Buelna's unfinished chemical mixture is not necessarily useless to the State's case, however. After all, the State need not prove that Buelna completed the manufacturing process or produced a final product for us to sustain his conviction. Bush, 772 N.E.2d at 1023. In Halsema v. State, 823 N.E.2d 668, 674 (Ind. 2005), we established two methods for proving the weight of controlled substances: The State must (1) show the "actual, measured weight" of the drugs or (2) "demonstrate that the quantity of the drugs or controlled substances is so large as to permit a reasonable inference that the element of weight has been established." An intermediate chemical mixture is not a controlled substance or drug under the Indiana criminal code—as we've discussed above, it is neither "adulterated" nor "pure" methamphetamine. Halsema therefore requires the State to present more than the mere weight of the intermediate mixture.

Consequently, we hold that if the State relies on an unfinished chemical mixture to satisfy the three-gram enhancement, it must demonstrate how much final product a defendant's particular manufacturing process would have yielded had it not been interrupted by police or other intervening circumstances. Simply presenting massive quantities of intermediate mixtures or precursors is insufficient to establish the weight enhancement absent evidence of final yield. Because methamphetamine manufacture is a complicated process that depends on a variety of independent factors, unfinished mixtures and precursors alone tell a jury nothing about how much final product can be produced. Juries need evidence of *yield*; and no amount of intermediate mixture or precursors, standing alone, is sufficient to sustain the weight enhancement.

Importantly, sufficient evidence of final yield need not come from an expert witness. It may come from a skilled witness under Indiana Evidence Rule 701, "with 'a degree of knowledge short of that sufficient to be declared an expert under Indiana Evidence Rule 702, but somewhat beyond that possessed by the ordinary jurors.'" Kubsch v. State, 784 N.E.2d 905, 922 (Ind. 2003) (alteration omitted) (quoting 13 Robert Lowell Miller, Jr., Indiana Evidence § 701.105, at 318 (2d ed. 1995)). Skilled witness testimony is permissible as long as the method the witness uses for showing final yield is accurately tailored to the specific manufacturing conditions, ingredients, and skill of the accused. And the testimony cannot leave reasonable doubt that the defendant's final yield would fail to surpass the three-gram threshold—or the one-gram, five-gram, or ten-gram thresholds under the new statute. Fancil v. State, 966 N.E.2d 700, 707 (Ind. Ct. App. 2012), trans. denied; Halferty v. State, 930 N.E.2d 1149, 1154 (Ind. Ct. App. 2010), trans. denied.

We also reject a one-size-fits-all method of showing final yield because manufacturing techniques and ingredients vary from lab to lab, and the form in which law enforcement officers discover an intermediate product may not allow for uniform scientific analysis. Buelna argues that sufficient evidence of the weight of final yield can only be shown using a conversion ratio based on the amount of ephedrine or pseudoephedrine used by the manufacturer. This is an acceptable method so long as the State can also establish that a defendant used a sufficient amount of precursors to successfully convert ephedrine or pseudoephedrine into methamphetamine, and had the capability and skill to do so. See Harmon, 971 N.E.2d at 685 (Vaidik, J., concurring in result); Fancil, 966 N.E.2d at 707. But in Buelna's case, where the State relied on the weight of an intermediate mixture containing liquid methamphetamine, we cannot confidently say that evidence of a conversion ratio based on the amount of ephedrine or pseudoephedrine would have accurately shown the weight of the final yield. Nor have the parties briefed us on whether the conversion ratio method would accurately prove the final yield for all possible manufacturing techniques. We are judges, not scientists, and do not decide today whether any one method of proving final yield may be superior to all others.

In this case, the State presented no evidence of the weight of the final product that any of Buelna's intermediate mixtures would have yielded, much less the final yield of the thirteen-gram liquid sample. The thirteen-gram sample is therefore insufficient to independently sustain Buelna's conviction. But the State relied on more than just that sample. It also relied on testimony of Buelna's co-manufacturer and their mutual friend that Buelna successfully manufactured six grams of final product. And as discussed below, we find that testimonial evidence to be sufficient.

III. Direct Evidence of Over Three Grams of Final Product Supports Buelna's Conviction.

The process of proving weight becomes much simpler when the State presents direct evidence of the weight of a defendant's final yield. As stated above, the State must either show the drug's "actual, measured weight" or that the final product was so large that a jury could reasonably infer the weight enhancement was met. Halsema, 823 N.E.2d at 674. Here, the jury did not consider an "amount of drugs so large" that it could reasonably infer that the weight element was satisfied. That method is not at issue in this case. But it could have considered "actual, measured weight" of final yield when it heard testimony that one of Buelna's accomplices pulled about six grams of methamphetamine from three reaction vessels that he and Buelna had used to manufacture methamphetamine together. On the basis of that testimony, we affirm Buelna's conviction.

A. Direct Evidence of the Final Yield.

There are several ways for the State to present direct evidence of the “actual, measured weight” of a defendant’s final yield. The State may introduce evidence of the amount of tangible, finished product as weighed by a forensic scientist. *E.g.*, Wilhelmus v. State, 824 N.E.2d 405, 416–17 (Ind. Ct. App. 2005). The State may also elicit direct testimony of the actual weight of the final yield from “those who regularly use or deal in the substance” or “developed an acute ability to assess the weight” of the drugs in which they deal. Halsema, 823 N.E.2d at 674 (internal quotation marks omitted). Or the State may offer testimony from police officers or detectives who regularly investigate methamphetamine crimes to establish the weight of the final product. See id. These are just three examples of how the State may show the “actual, measured weight.”

But only direct evidence, not circumstantial evidence, may sustain a weight enhancement. Evidence of spent reaction vessels that test positive for methamphetamine found alongside piles of precursors and paraphernalia—empty boxes of pseudoephedrine, piles of lithium batteries, bottles of Coleman fuel, and coffee filters—will certainly support the lesser included offenses of Class B felony manufacturing methamphetamine or Class C felony possession of precursors. But precursors and spent reaction vessels are not the “actual, measured weight” of three grams of methamphetamine. They are simply circumstantial evidence of manufacturing activity.

Circumstantial evidence, however, may corroborate the credibility of a witness who testifies that a particular defendant manufactured a specific amount of methamphetamine. A jury that hears a defendant’s co-manufacturer state that he pulled ten grams of methamphetamine from five reaction vessels may be more likely to believe him if the State is able to show that they discovered at least five spent reaction vessels at the location where the defendant was “cooking.” But the jury is free to believe the co-manufacturer even without any corroborating or circumstantial evidence, because “[i]t is the fact-finder’s role, not that of appellate courts, to assess witness credibility and weigh the evidence to determine whether it is sufficient to support a conviction.” Drane, 867 N.E.2d at 146. As discussed below, there was sufficient evidence to support Buelna’s conviction.

B. The Evidence Is Sufficient to Support Buelna’s Conviction.

Buelna’s accomplice, Slabach, admitted to pulling about six grams of methamphetamine from three spent vessels in the attic on the morning of Buelna’s arrest, and Pantoja testified that

Buelna and Slabach had been “cooking” methamphetamine together earlier that same day. The State presented evidence that eight spent reaction vessels were found in the attic, in addition to the three active vessels. In this case, then, there is direct testimony of “actual, measured weight” well in excess of the three-gram threshold by someone who “regularly use[s] or deal[s] in the substance” or “developed an acute ability to assess the weight” of the drugs they manufacture, Halsema, 823 N.E.2d at 674, and of Buelna’s participation in the process. And the circumstantial evidence of the presence of eight spent reaction vessels corroborates Slabach’s and Pantoja’s testimony.

The jurors were certainly free to disbelieve Slabach’s and Pantoja’s testimony. But they could also reasonably rely on that testimony alone to conclude beyond a reasonable doubt that the “actual, measured weight” of the pure methamphetamine produced by Buelna was well in excess of the three-gram minimum necessary to exceed the A-felony threshold. Under the standard of review for sufficiency claims, in which we consider only the evidence favorable to the judgment without reweighing, Slabach’s and Pantoja’s testimony is sufficient to establish the weight threshold beyond reasonable doubt. Thus, we affirm Buelna’s conviction.

Conclusion

Methamphetamine is a poison that destroys the individuals who use it and harms the communities in which they live. Last year, our State had the highest rate of methamphetamine laboratory seizures in the entire nation. Justin L. Mack, Indiana is No. 1 in Meth Lab Busts, Indianapolis Star, April 2, 2014, at A8. That statistic memorializes the seriousness with which authorities have responded to this plague and soberly reminds us how pervasive methamphetamine manufacture has become. Our General Assembly has appropriately mandated that those who manufacture more “pure or adulterated” methamphetamine should be punished more severely than those who manufacture less.

But we must also construe the ambiguous term “adulterated” consistent with our precedent, the realities of the manufacturing process, the structure of the methamphetamine statute, and the rule of lenity: “Adulterated” methamphetamine refers to the final, extracted product that may contain lingering impurities or has been subsequently debased or diluted by a foreign substance—not an intermediate mixture that happens to contain methamphetamine. The State may only use such an intermediate mixture to support a weight enhancement if it demonstrates how much “pure or

adulterated” methamphetamine that mixture would have yielded had the defendant completed the manufacturing process.

Here, the State improperly relied upon the weight of an intermediate mixture to support the enhancement without proof of how much final product it would have yielded. Yet the testimony of Buelna’s co-manufacturer and their mutual friend sufficiently established that Buelna manufactured well over three grams of additional methamphetamine. We therefore affirm Buelna’s conviction for Class A felony manufacturing methamphetamine.

Dickson, Rucker, David, and Massa, JJ., concur.