## **United States Court of Appeals**For the First Circuit

No. 07-2164

UNITED STATES OF AMERICA,

Appellee,

V.

DIANA PIESAK,

Defendant, Appellant.

APPEAL FROM THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF MASSACHUSETTS

[Hon. F. Dennis Saylor, IV, <u>U.S. District Judge</u>]

Before

Lipez and Howard, <u>Circuit Judges</u>, and Besosa,\* District Judge.

 $\underline{\text{Jaclyn-Greenhalgh}}$ , with whom  $\underline{\text{Peter L. Ettenberg}}$  was on brief, for appellant.

<u>David Hennessy</u>, Assistant United States Attorney, with whom <u>Michael J. Sullivan</u>, United States Attorney, was on brief, for appellee.

March 26, 2008

 $<sup>^{\</sup>star}$ Of the District of Puerto Rico, sitting by designation.

HOWARD, Circuit Judge. After a three-day trial, a jury convicted Diana Piesak of attempting to manufacture ecstasy in violation of 21 U.S.C. § 846. The district court sentenced Piesak to 18 months' imprisonment and two years' supervised release. In this appeal, Piesak argues that the evidence was not sufficient to support a conviction. We disagree. Evidence presented at trial showed that Piesak: (1) acquired ingredients necessary to manufacture ecstacy; (2) researched, obtained, and actively studied ecstasy recipes; and (3) acquired, assembled and tested equipment used to manufacture ecstacy. This evidence was sufficient to support the conviction.

## I. Facts

This being a challenge to the sufficiency of the evidence, we state the facts in the light most accommodating to the jury's verdict. <u>United States</u> v. <u>Pérez-González</u>, 445 F.3d 39, 42 (1st Cir. 2006).

In late 2005, agents in the Drug Enforcement Administration's ("DEA") Worcester, Massachusetts office learned that a Canadian company was shipping chemicals used to make ecstasy to individuals in the United States. One of the recipients was Diana Piesak. Piesak, who resided with her family in Dudley, Massachusetts, was a full-time student at the Massachusetts College of Pharmacy.

In the course of its investigation, the DEA applied for and obtained a warrant to search Piesak's home. The search, conducted in March 2006, yielded chemicals and equipment used to manufacture ecstasy, in addition to written information about the process of manufacturing ecstasy.

The items recovered included twelve bottles of sassafras oil as well as a variety of chemicals including ammonium chloride, and muriatic acid. At trial, a senior forensic chemist with the DEA testified about these items. In summary, his testimony was that: (1) all of the items were either necessary or useful for making ecstasy according to the "Wacker Oxidation" method; (2) that method is popular among makers of ecstasy because it enables them to make MDP2P rather than purchasing it; (3) MDP2P, a chemical needed to make ecstasy, is closely monitored by the DEA; (4) sassafras oil, which is readily available, is an ingredient used in making MDP2P; (5) Ammonium chloride and muriatic acid are chemicals used to convert MDP2P into ecstasy; and (6) Piesak possessed enough sassafras oil to make 800 to 1600 "hits" of ecstasy.

In the search, the DEA agents also recovered a three-ring binder and Piesak's computer. The binder contained nearly 100 pages of information about the ecstasy synthesizing process that had been downloaded from websites. The binder included: (1) a fifteen-page document titled "The Main Precursors"; (2) a document of more than twenty pages published in the Journal of Forensic

Sciences titled "An Evaluation of the Potential for Clandestine Manufacture of . . . [Ecstasy]<sup>1</sup> Analogs and Homologs"; (3) a one page document titled "Preparation of Sodium Cyanoborohydride"; (4) a six-page document titled "Reductive Animation of MDP2P using Sodium Cyanoborohydride. The discussion of the accessibility of the latter chemical was underlined and circled.

Other documents in the binder specifically addressed the synthesis of ecstasy: (5) a six-page document titled "Synthesis of [Ecstasy]," which cross referenced another article about the clandestine manufacture of certain chemicals, identified methods of producing chemicals popular with clandestine chemists, and listed "methylamine" as a monitored chemical that, if ordered, could attract DEA attention. Several portions of this document were highlighted; (6) a six-page document titled "MDA"; (7) a five-page document titled "Ecstasy and Eve"; (8) a more than twenty page document titled "Eleusis versus Uncle Fester,"; (9) a four-page document titled "Chem 269 Crystallization Part 2"; (10) an eleven-page document titled "A Working MDMA (Ecstasy) Synthesis"; and finally, (11) a ten-page document titled "A Complete MDMA Synthesis For the First Time Chemist." Within this document was a list titled "What You Need." The document noted that the list was for

<sup>&</sup>lt;sup>1</sup> Many of the documents discuss the manufacture of "MDMA," or "methylendedioxymethamphetamine," a scientific name of ecstasy.

<sup>&</sup>lt;sup>2</sup> "Methylamine" is a chemical precursor for making ecstasy.

"the basics." The list included two headings: one titled "Apparatus and Glass" and another titled "Chemicals." Check marks had been handwritten next to certain equipment and chemicals. Some of the items checked were not recovered during the search and some of the items not checked had been ordered by Piesak through eBay.

An examination of Piesak's computer disclosed, among other items, text fragments revealing a search for "sassafras oil," a document referencing ecstasy and color changes, and product information on "sodium cyanoborohydride."

The senior forensic chemist testified that the amount of information recovered suggested that Piesak had gone through "a great deal of trouble . . . in terms of researching [the ecstasy making] processes." He noted that making ecstasy is a matter of following directions and that the documents in the binder were consistent with the manufacture of ecstasy by the Wacker Oxidation Method.

Inside the home, the agents also discovered equipment. Included among this equipment was: (1) a glass beaker with a glass conductor tube; (2) round bottom flasks; (3) a graduated cylinder; (4) boiling chips; (5) rubber stoppers; (6) hose clamps; (7) vacuum grease; (8) filter paper; (9) a digital thermometer; (10) pH test paper; (11) a bi-weight digital scale; (12) a hydroaspirator water pump; (13) a Corning hot plate; (14) a Thermolyne hot plate; and (15) a bag of 250 gelatin capsules. At trial, the senior forensic

chemist testified that this equipment could be used to manufacture ecstasy.

Further investigation yielded more information about equipment. An analysis of Piesak's computer showed that she had searched for a "hot plate stirrer" and for information about pumps and flasks. A document discussing aspirator pumps was also found. A computer forensic examiner also discovered emails between Piesak and an Alabama company discussing her purchase of a hotplate stirrer. Piesak informed the company that the hotplate stirrer did not heat "anything above 90 degrees," and thus was not performing as the company had advertised. A representative responded offering Piesak a refund or credit. Finally, Piesak admitted to agents that she brought an aspirator she had acquired to a hardware store, where it was affixed to a wood support so it could be connected to a water pump.

Piesak was arrested during the search, and she ultimately acknowledged that she intended to manufacture ecstasy. She explained that she had tried the drug in November of 2005 and had enjoyed it so much that she wanted to make her own. Although she said that she had not attempted to make ecstasy, she also stated that she had intended to make ecstasy in the room next to her bedroom. When a DEA chemist asked Piesak where additional chemicals -- including palladium, sodium cyanoborohydride, formalene, and chloride -- were located, Piesak told him that she

had placed the chemicals in trashbags and discarded them on a roadside. She said she did so after the Webster, Massachusetts Police Department called her to arrange a meeting regarding an unrelated matter.

In November of 2006, a federal grand jury returned a one-count indictment charging Piesak with attempted manufacture of ecstasy in violation of 21 U.S.C. § 846. As noted above, at trial a senior DEA forensic chemist testified that, at one point, Piesak had the chemicals, recipes, and equipment needed to manufacture ecstasy according to the Wacker Oxidation method. During the trial, Piesak moved twice for a judgment of acquittal. See Fed. R. Crim. P. 29. The court denied both motions. A jury found Piesak guilty of attempted manufacture of ecstasy.

## II. Discussion

The sole issue on appeal is whether sufficient evidence supported the jury's verdict. Where, as here, a defendant preserves a sufficiency challenge by a motion for judgment of acquittal our review is de novo. <u>United States</u> v. <u>Potter</u>, 463 F.3d 9, 13 (1st Cir. 2006). We will affirm the conviction if, after viewing the evidence in the light most favorable to the government and taking all inferences in its favor, we conclude that a reasonable jury could have found the government proved the elements of the crime beyond a reasonable doubt. <u>United States</u> v. <u>Dwinells</u>, 508 F.3d 63, 72 (1st Cir. 2007); <u>see also United States</u> v.

<u>Woodward</u>, 149 F.3d 46, 56 (1st Cir. 1998) (noting that defendant who challenges the sufficiency of the evidence "bear[s] a heavy burden" on appeal").

To establish criminal attempt, the government must prove beyond a reasonable doubt that the defendant (i) intended to commit the substantive offense, in this case the manufacture of ecstasy; and (ii) took a substantial step towards its commission. <u>United States v. Turner</u>, 501 F.3d 59, 68 (1st Cir. 2007). Because Piesak concedes that she intended to manufacture ecstasy, our focus is on the substantial step requirement. A "substantial step" is less than what is necessary to complete the substantive crime, but more than "mere preparation." <u>United States v. Rodríquez</u>, 215 F.3d 110, 116 (1st Cir. 2000).<sup>3</sup>

Four features of the factual record in this case convince us that sufficient evidence supported the jury's verdict. First, Piesak placed orders for, and at one point possessed, all of the chemicals necessary to make ecstasy by the Wacker Oxidation method. Spencer, 439 F.3d at 916 (evidence sufficient to support

We have further provided, "[I]n order to constitute a substantial step leading to attempt liability, an actor's behavior must be 'of such a nature that a reasonable observer, viewing it in context could conclude beyond a reasonable doubt that it was undertaken in accordance with a design to violate the statute." United States v. Rivera-Solà, 713 F.2d 866, 870 (1st Cir. 1983) (citation omitted).

<sup>&</sup>lt;sup>4</sup> Piesak argues that she did not take a substantial step in part because she had discarded some of the chemicals necessary to manufacture ecstasy prior to the DEA's execution of the search

defendant's conviction for attempted manufacture of methamphetamine where, in addition to possessing necessary equipment, defendant "had ordered, received, and possessed chemicals necessary to manufacture [the drug]"). Second, she conducted significant research regarding the ecstasy manufacturing process, and printed and actively studied documents that explained how to make the drug. See United States v. Jessup, 305 F.3d 300, 304 (5th Cir. 2002) (holding defendant took substantial step toward manufacturing drug where, in addition to stating an intent to manufacture drug and possessing useful ingredients, defendant possessed a recipe for making drug).

Third, Piesak sought information about, acquired significant amounts of, and tested and assembled laboratory equipment. See <u>United States</u> v. <u>Felix</u>, 867 F.2d 1068, 1071 (8th Cir. 1989) (defendant took a substantial step toward manufacture of

warrant. The record reveals, however, that she said that she discarded these chemicals after the Webster Police Department contacted her to arrange an interview. In any event, she did not need to possess all of the chemicals necessary to manufacture ecstasy at the time of the search in order for there to be sufficient evidence underlying the jury's verdict. United States v. Spencer, 439 F.3d 905, 916 (8th Cir. 2006) (affirming defendant's conviction for attempted manufacture of methamphetamine despite fact that defendant did not possess all the necessary supplies to manufacture drug at the time of the seizure); United States v. Becker, 230 F.3d 1224, 1234 (10th Cir. 2000) (noting that where defendant possessed some, but not all, of the chemicals required to make methamphetamine, "a rational jury could conclude that [defendant] took a substantial step towards manufacturing drug"). It is also worth noting that Piesak never requested a renunciation charge at trial.

illicit drug where he, in addition to ordering necessary chemicals, possessed equipment useful to the manufacturing process).

Finally, in addition to possessing the chemicals, recipes, and equipment needed to make ecstasy, Piesak admitted to the DEA that she intended to make the drug in her house. This is a textbook scenario under the Model Penal Code's treatment of conduct illustrative of a substantial step. Mode Penal Code § 5.01(2). Under the heading, "Conduct That May Be Held Substantial Step Under Subsection 1(c)" the Code lists types of conduct that suffice "if strongly corroborative of the actor's criminal purpose." Id. Included in this list is:

(f) possession, collection or fabrication of materials to be employed in the commission of the crime, at or near the place contemplated for its commission, if such possession, collection or fabrication serves no lawful purpose of the actor under the circumstances.

Id. Here, Piesak admitted that she intended to use the acquired materials to manufacture ecstasy. She had assembled voluminous instructions and recipes for illicit manufacture. And she identified no lawful purpose for the chemicals and equipment.

Piesak argues that her actions constitute mere preparation and did not rise to the level of attempt. In particular, she notes that the chemicals' plastic seals had not been removed and that she had not constructed a working ecstasy laboratory.

In the past we have noted that "[while] 'mere preparation' does not constitute a substantial step, a defendant 'does not have to get very far along the line toward ultimate commission of the object crime in order to commit the attempt offense.'" United States v. Turner, 501 F.3d 59, 68 (1st Cir. 2007) (citation omitted).

Here, in light of the evidence recounted above, the jury was entitled to conclude that Piesak had gone far enough. Not only did she acquire all of the chemicals necessary to make ecstasy but she researched, obtained, and actively studied ecstasy recipes and assembled, tested and customized equipment used to manufacture ecstasy. While Piesak may not have yet removed the plastic seals from the chemicals nor fully assembled a working ecstasy laboratory, the evidence on the whole easily supports the jury's conclusion that she had moved past the preparation threshold to an attempt. See Rivera-Solá, 713 F.2d at 866 ("A substantial step . . . may be less than the last act necessary before the actual commission of the substantive crime, and thus the finder of fact may give weight to that which has already been done as well as that which remains to be accomplished before commission of substantive crime.") (quoting <u>United States</u> v. <u>Manley</u>, 632 F.2d 978, 987-88 (2d Cir. 1980)); United States v. Mazzella, 768 F.2d 235, 240 (8th Cir. 1985) (concluding sufficient evidence supported defendant's conviction for attempted manufacture of methamphetamine

where defendant acknowledged ordering, receiving, and possessing chemicals and equipment necessary to make methamphetamine but where chemical containers remained unopened); see also United States v. Smith, 264 F.3d 1012, 1016-17 (10th Cir. 2001) (noting that evidence may be sufficient to support conviction for attempted manufacture of methamphetamine even though defendant did not have a full "working lab" or all the necessary "precursor chemicals").

## III. Conclusion

For the reasons discussed above, we affirm.