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Waste Not Want Not: Chinese Recyclable Waste Restrictions, Their Global Impact, and Potential U.S. Responses

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Waste Not Want Not: Chinese Recyclable Waste Restrictions, Their Global Impact, and Potential U.S. Responses

Cover Page Footnote

J.D. Candidate, 2020, The University of Chicago Law School. Thank you to Professors Mark Templeton and Mary Ellen O'Connell for their input and feedback.

Waste Not Want Not: Chinese Recyclable Waste Restrictions, Their Global Impact, and Potential U.S. Responses

Colin Parts*

Abstract

Since 2013 China has introduced increasingly stringent restrictions on imports of recyclables, and those restrictions have severely limited the amount of recyclables allowed into the country. Because China plays such a large role in handling global recycling flows—including waste from the U.S.—these restrictions are likely to have enormous impacts on trade in recyclables over the long term. The restrictions are potentially vulnerable to challenge within the World Trade Organization (WTO), but challenging the restrictions could create many negative impacts and be seen as an action akin to U.S. imperialism by denying China a right to a healthy environment. The domestic Chinese recyclables trade, however, has seen a great deal of economic benefit already from these restrictions—so it seems difficult to argue that any Chinese restrictions are purely motivated by a desire for a better environment. Additionally, the ongoing trade war between the U.S. and China could complicate any attempt to bring a suit. Although it is likely that the U.S. would be able to win a WTO dispute challenging the Chinese restrictions, the costs of filing a suit outweigh the benefits and the U.S. should not challenge the restrictions.

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I. INTRODUCTION

As opportunities for recycling diverse materials increase and natural resources become scarcer, the global recycling trade continues to grow and diversify. Throughout the 2010s, China introduced multiple restrictions on importing recyclable materials, steadily increasing the restrictions and limiting the influx of recyclables into the country.¹ China's initial restrictions were largely focused on preventing smuggling and imposing minor contamination limits (limits on the amount of non-recyclable material that is accidentally included in a shipment of recyclable material).² China's most recent restrictions, however, include outright bans on a variety of materials, as well as contamination limits so low that recyclables processing plants may be unable to produce sufficiently clean recyclables streams.³

These restrictions pose a serious problem for the U.S. and the rest of the international community because China processes an enormous share of the recyclable material produced globally.⁴ Usually, where one door closes, a window will open. In this case, however, the windows have begun to close as well. Soon after China's more stringent restrictions were implemented, other nearby countries began processing many of the recyclables that had been rejected at Chinese ports.⁵ But those countries seemingly could not handle either the contamination in the shipments or the influx of recyclables generally, because they have begun to introduce their own restrictions.⁶ As a result, there is no readily available place to send the U.S.'s recyclables, and the problem of dealing with recyclables grows as more recyclables are produced.

¹ *From Green Fence to Red Alert: A China Timeline*, RESOURCE RECYCLING (Sept. 25, 2018), <http://perma.cc/D6U6-YY5G>.

² *Id.*

³ Gwynn Guilford, *China Doesn't Want Your Trash Anymore—and That Could Spell Big Trouble for American Cities*, QUARTZ (May 8, 2013), <http://perma.cc/F95G-9RAY>; Colin Staub, *China's Slightly Laxed Limit Does Little for Paper*, RESOURCE RECYCLING (Dec. 5, 2017), <http://perma.cc/CB88-7JD6>.

⁴ Costas Velis, *Global Recycling Markets: Plastic Waste*, INTERNATIONAL SOLID WASTE ASSOCIATION (Sept. 2014), <http://perma.cc/KAK2-T88S>.

⁵ Colin Staub, *Where Exports Displaced from China are Finding a Home*, RESOURCE RECYCLING (Jan. 16, 2018), <http://perma.cc/AQ8M-S22R>.

⁶ *See, for example*, Quang Minh, *Gov't Will No Longer Grant Licenses for Waste Imports*, THE SOCIALIST REPUBLIC OF VIETNAM ONLINE NEWSPAPER OF THE GOVERNMENT (July 25, 2018), <http://perma.cc/L9GZ-PBBN>.

Recyclables are increasingly traded internationally and processed far from where the recyclable materials are first collected.⁷ Over time a trend has established itself in which developed countries are increasingly sending their waste to developing countries.⁸ It is likely that this trend is partially motivated by cost considerations, as it may be cheaper for developing countries to process the waste than for developed countries to do so because of their different regulatory frameworks regarding labor and environmental costs.⁹ One study of recyclables flows noted that “[u]nlike the relatively capital intensive and robustly regulated recycling infrastructure of developed countries, the recycling infrastructure of developing countries is labour intensive, largely in the informal sector, and often with minimal environmental controls.”¹⁰ The study found that over the 11-year time frame during which it gathered data, flows of recyclable materials to “low-middle income” countries steadily replaced the flow of recyclables to “high-income” countries.¹¹ Less a product of policy than profit motivations, this trend has resulted in concentrated recyclables flows towards China (among other nations).¹²

The U.S. lacks sufficient infrastructure to deal with the Chinese restrictions. Many U.S. recycling facilities are unable to meet the very low contamination levels that China has set, meaning they are unable to export their materials to China. There are also insufficient facilities in the U.S. to process these recyclable materials and create reusable products locally. Accordingly, many U.S. recycling facilities have been forced to put their recyclables in landfills or simply hold onto the materials until some new opportunity for export emerges.¹³

The U.S.’s trade war with China further weakens the position from which the U.S. could engage in diplomatic negotiations with China over shipments of recyclables. The U.S. and China have both levied millions of dollars of tariffs on goods and it is not apparent that either country is willing to back down.¹⁴ This sets

⁷ See Donald Lyons, Murray Rice, & Robert Wachal, *Circuits of Scrap: Closed Loop Industrial Ecosystems and the Geography of US International Recyclable Material Flows 1995-2005*, 175 GEOGRAPHICAL J. 286 (Dec. 2009).

⁸ *Id.* at 290.

⁹ *Id.* at 289.

¹⁰ *Id.*

¹¹ *Id.* at 292. The study used the World Bank Income Groups, which categorize countries as high income, high-middle income, low-middle income, and low income.

¹² *Id.*

¹³ Amy L. Brooks, Shunli Wang, & Jenna R. Jambeck, *The Chinese Import Ban and its Impact on Global Plastic Waste Trade*, SCI. ADVANCES, June 2018, at 4.

¹⁴ Brian Schwartz, *Chinese Official Tells American Investors at a Meeting: We Don't Fear a Trade War with the U.S.*, CNBC (Oct. 22, 2018), <http://perma.cc/78GC-6XP8>.

a tone decidedly antithetical to diplomatic discussions about how to deal with the U.S.'s overwhelming backlog of recyclable materials.

Diplomatic negotiations aside, the U.S. may have another path to force China's hand in changing its recyclables restrictions: bring a suit in the World Trade Organization (WTO) Dispute Settlement Body. Since China is a part of the WTO, it is subject to the same restrictions facing all other WTO members. Among the most important agreements to which China is a party is the General Agreement on Tariffs and Trade (GATT).¹⁵ The GATT requires countries to (among other things) treat goods from other countries the same way that similar domestic goods are treated, a principle termed "national treatment."¹⁶ The U.S. could potentially file suit in the WTO and argue that China has failed to follow its national treatment obligations by implementing these restrictions on imports of recyclable materials into China while simultaneously not imposing the same restrictions on local recyclables streams.¹⁷

Under current WTO case law, China could potentially defeat this allegation by arguing that its restrictions fall under the Article XX(b) exception to the GATT, which protects restrictions that are "necessary to protect human, animal or plant life or health."¹⁸ However, WTO case law makes it unlikely that China would be able to meet the requirements for the XX(b) exception, making the U.S. likely to succeed if it challenged the restrictions.

Even though the U.S. would likely succeed in a WTO suit, the costs of winning seem to outweigh the benefits. The economic benefits are fairly straightforward: depending on how the restrictions are revised, U.S. recyclables processors would have a market for their materials, and profits and jobs would return. There are also environmental benefits to consider: more processed recyclables would mean less demand for energy and natural resources.¹⁹ In terms of costs, the potential suit will require resources and could damage the U.S.'s relationship with China (which could have serious trade and diplomatic ramifications), and China could possibly refuse to comply with a WTO order.²⁰

¹⁵ General Agreement on Tariffs and Trade 1995, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187 (1994) [hereinafter GATT].

¹⁶ Chris Wold, *A Primer on the WTO and the Global Trading System*, LEWIS AND CLARK LAW SCHOOL: INTERNATIONAL ENVIRONMENTAL LAW PROJECT (Nov. 2, 2000), <http://perma.cc/V6Z4-TDEL>.

¹⁷ World Trade Organization, Protocol on the Accession of the People's Republic of China, Annex 1A: Information to be Provided by China in the Context of the Transitional Review Mechanism, WTO Doc. WT/L/432 (Nov. 23, 2001), at ¶ 1(a).

¹⁸ GATT, *supra* note 15, at art. XX(b).

¹⁹ Ben Mandler, *Recycling as a Source of Mineral Commodities*, AMERICAN GEOSCIENCES INSTITUTE (Mar. 2017), <http://perma.cc/7GZM-QPE2>.

²⁰ See, for example, Report of the Panel, *China – Anti-dumping and Countervailing Duty Measures on Broiler Products from the United States: Recourse to Article 21.5 of the DSU by the United States*, 125–26, WTO Doc.

Additionally, the U.S. could be seen as engaging in environmental imperialism by forcing China to re-open its ports to harmful waste that it has specifically sought to avoid in order to improve its environment.²¹ Thus, although it is possible that the U.S. would succeed if it filed suit in the WTO the U.S. should not file suit because the many costs associated with the suit outweigh the potential benefits.

Section II of this Comment begins with a discussion of the restrictions China has implemented, walking through the chronological iterations and asserted justifications of these policies over time. It continues by examining the role that China has played in the global recycling industry, and the recycling industry's role in the U.S. economy—highlighting the economic harms that the restrictions have caused. The Section concludes with an analysis of China's relationship with the U.S. and its role in the WTO.

Section III starts with a discussion of China's environmental problems and the growth of Chinese environmental law over time. It then examines the underlying international trade law to which China is subject.

Section IV first lays out the WTO case law's position towards the environmental exception under Article XX(b). Next, it analyzes the likely outcome of a WTO suit filed by the U.S. asking China to revise its restrictions, applying WTO case law to the facts of the dispute at issue. Ultimately, this Comment demonstrates that although the U.S. could win a WTO dispute regarding China's recyclables restrictions, it should not challenge the restrictions through the WTO because the potential costs associated with the challenge outweigh the benefits. This Comment's conclusion provides an overview of this multifaceted problem and acknowledges the uncertain future for the global recycling trade and the U.S. industries involved in that trade.

II. INTRODUCTION TO THE RESTRICTIONS AND WHY THEY MATTER

China's program of recyclables restrictions has gone through multiple iterations and has become increasingly stringent over time. The restrictions were first implemented through the 2013 Green Fence program.²² Green Fence was then followed by one very short-term program in 2015 and a long-term program

WT/DS427/RW (Jan. 18, 2018); Action by the Dispute Settlement Body, *China – Anti-dumping and Countervailing Duty Measures on Broiler Products from the United States: Recourse to Article 21.5 of the DSU by the United States*, WTO DOC. WT/DS427/14 (Mar. 1, 2018) (holding that the Chinese government failed to come into compliance with an agreement it signed after it lost a WTO suit challenging its restrictions on U.S. broiler chicken products).

²¹ Carmen G. Gonzalez, *Beyond Eco-Imperialism: An Environmental Justice Critique of Free Trade*, 78 DENV. U. L. REV. 979, 979–80 (2001).

²² See Guilford, *supra* note 3.

in 2017 called National Sword.²³ National Sword was superseded by Blue Sky in 2018.²⁴ Further restrictions have been announced to follow Blue Sky and are expected to be implemented in 2019 and 2020.²⁵

A. Green Fence, 2013

China first introduced restrictions on recyclables in February 2013 with its Green Fence program, which placed restrictions on imports of recyclable materials that were considered contaminated.²⁶ The program implemented inspections of shipments of sorted recyclable materials coming into the country.²⁷ It would not allow shipments to pass through customs to recycling facilities if there were non-recyclable materials in the shipment, like trash in a shipment of plastic bottles.²⁸ It also blocked shipments that were not the type of recyclable materials described, such as a shipment of plastic bottles labeled as waste paper.²⁹ At the time, these restrictions were concerning for members of the international recycling community because shipments of recyclables tend to have some amount of contamination. Sorting facilities are efficient at removing contamination, but are not perfect.³⁰ As a result, this inevitable contamination meant that Chinese customs officers would potentially refuse recyclables shipments under the new standards, while shipments would have been accepted under the previous standards. For example, a shipment of plastic bottles that also happened to have paper mixed in could have been accepted two days before the program began, but would have been rejected once the new standards were in place. Recyclers in the U.S. had particular reason to worry because the U.S. does not have the capacity to

²³ Jared Paben, *China Announces 'Sword' Crackdown on Illegal Recyclable Material Imports*, RESOURCE RECYCLING (Feb. 21, 2017), <http://perma.cc/7UHN-CVDH>. Steve Wong—Executive President of the China Scrap Plastics Association—provided a translation of the text of the release to Resource Recycling.

²⁴ Steve Eminent, *China's Customs Authority Launches 'Blue Sky 2018'*, LETSRECYCLE.COM (Mar. 7, 2018), <http://perma.cc/LE6F-HKYR>.

²⁵ Colin Staub, *China Moves to Extend Ban to All Materials*, RESOURCE RECYCLING (July 18, 2018), <http://perma.cc/F9AL-ZYV6>.

²⁶ Guilford, *supra* note 3.

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ There does not seem to be an industry-wide estimate of post-sorting contamination, but the fact that 68,000 tons of recyclables were rejected under these new contamination standards indicates the sorting is decidedly imperfect. See Gwynn Guilford, *US States Banned from Exporting Their Trash to China Are Drowning in Plastic*, QUARTZ (Aug. 21, 2013), <http://perma.cc/DN46-X58E>.

process recyclables domestically if many shipments were rejected.³¹ That meant there was no U.S. domestic market for the sorted materials, and the shippers would potentially not be able to sell their materials to the Chinese customers who had routinely bought their materials.

The program also limited the potential market for recyclables imports in China even for those shipments of recyclables that were able to pass the contamination requirements. Under the same program the Chinese government eliminated hundreds of import licenses for Chinese recycling companies.³² Without an import license, a company that processes recyclables cannot bring recyclable material into the country from other nations. This meant that it was then possible for a U.S. recyclables sorting facility to lose its purchasing partner in China if the Chinese government chose to eliminate that Chinese corporation's import license.

The Green Fence program appeared to be motivated by serious concerns about the issues of waste contamination that China faced then and continues to face now. Among other environmental problems the country was confronting, there were mountains of trash slowly accumulating across the country.³³ Additionally, while many of the materials being sent to China were labeled as recyclable materials, instances of waste smuggling and mislabeling of materials as recyclable were common, as were incredibly contaminated shipments of recyclables. For instance, customs officials reported that they had seen "recyclables" shipments filled with forty percent nonrecyclable materials and shipments labeled as recycled rubber bands that were actually shipments of used tires (which China had specifically banned).³⁴

In the first five months after Green Fence was implemented, 61,700 metric tons of recyclables imports were rejected.³⁵ Although 61,700 is large, China imported an estimated 8,009,674 metric tons of recyclable plastic in 2010, so the proportion of rejected recyclables was not very large.³⁶ The implementation of the program was celebrated in the *South China Morning Post*, which wrote that the recycling industry had "added to the degradation of China's environment" and

³¹ Jerry Powell, *Plastics: The Big Picture*, Presentation, RESOURCE RECYCLING, <http://perma.cc/AZ2F-HV9J> (highlighting the fact that new recycling processing plants have been built seemingly exclusively outside of the U.S. after 2003).

³² Gwynn Guilford, *China's Green Fence is Here to Stay: Why Your Water Bottle Won't Be Recycled*, THE ATLANTIC (Sept. 16, 2013), <http://perma.cc/T4CU-2AAS>.

³³ Gwynn Guilford, *China's Trash Troubles Are Piling up Fast – in Fact, They're Forming Mountains*, QUARTZ (Mar. 22, 2013), <http://perma.cc/52YD-BNBK>.

³⁴ *China Recycling Clean-Up Jolts Global Industry*, SOUTH CHINA MORNING POST (Oct. 3, 2013), <http://perma.cc/BJT8-N8LW>.

³⁵ Guilford, *supra* note 30.

³⁶ Brooks, *supra* note 13, at Supp. 2018, <http://perma.cc/3YQE-2MEP>.

that the Chinese government “wants to be seen as addressing increased public awareness and concern over pollution.”³⁷ Despite its public relations success, the Green Fence program was a temporary program with a planned end date of November 2013.³⁸

1. China followed Green Fence with a short-term program in 2015.

In 2015, China implemented a two-month program aimed at verifying whether recyclables imports were being processed correctly and preventing the import of contaminated shipments.³⁹ The program was specifically focused on plastic imports and was achieved through a directive to local authorities, rather than as a larger campaign like the Green Fence program.⁴⁰ The program was implemented in partnership with the anti-smuggling agency within the General Administration of Customs, and it had two goals: preventing recyclables smuggling and preventing resale of smuggled recyclables.⁴¹ According to the International Scrap Trade Database, China imported 7.3 million metric tons of plastic scrap (about forty-eight percent of global plastic imports) and 29.2 million metric tons of recovered fiber (over fifty percent of global fiber imports) in 2015.⁴²

Information about the program’s success is limited and annual figures cannot speak well to the success of a program in place for only two months. On one hand, the multiple iterations of later programs suggest that the program was unsuccessful and that the government was forced to try again. On the other hand, it could be read to say that the program was very successful and the government wanted to further compound the success it achieved with this program.

B. National Sword, 2017

China first announced a multifaceted policy called National Sword on February 7, 2017. The program was launched by the General Administration of Customs and the press release stated that the recyclables side of the program would specifically focus on trying to limit recyclables smuggling and illegal recycling operations (carrying over the goals of previous iterations of the

³⁷ SOUTH CHINA MORNING POST, *supra* note 34.

³⁸ RESOURCE RECYCLING, *supra* note 1.

³⁹ *Two-Month Crackdown Relating to China’s Plastic Scrap Imports*, BUREAU OF INTERNATIONAL RECYCLING (Nov. 5, 2015), <http://perma.cc/W76H-GJS9>.

⁴⁰ Bobby Elliott, *China Again Cracks Down on Scrap Plastic Imports*, RESOURCE RECYCLING (Nov. 11, 2015), <http://perma.cc/4PBP-AZMR>.

⁴¹ BUREAU OF INTERNATIONAL RECYCLING, *supra* note 39.

⁴² *China Asks to Ban Mixed Paper and Many Plastic Scrap Grades*, RECYCLING TODAY (July 19, 2017), <http://perma.cc/N4WT-FKPZ>.

recyclables restrictions).⁴³ Importantly, the program was to be part of a larger program also targeting smuggling of other products, including drugs and guns.⁴⁴ The waste to be inspected included industrial, electronic, household, and plastic waste.⁴⁵ A U.S.-based industry group, the Institute of Scrap Recycling Industries, Inc., reported that every container being exported to China was being inspected when it arrived at port.⁴⁶ The Chinese press release also said that the General Administration of Customs would work with China's Ministry of Environmental Protection in implementing the restrictions.⁴⁷

China later announced, via a July 18, 2017 filing with the WTO, that it would ban the import of recovered mixed paper, as well as recycled polyethylene terephthalate (PET) (plastic often used in bottles and other common recyclable plastic items)⁴⁸ and other materials.⁴⁹ The ban was put in place after inspections earlier in July 2017 found that two-thirds of the Chinese recycling companies inspected by the Chinese government were violating Chinese environmental regulations.⁵⁰ At the time, there was some confusion over whether these specific investigations of the recycling companies were a part of National Sword or a part of a separate program.⁵¹ However, as time passed, National Sword became an umbrella term to refer to all of the different recyclables restrictions China has put in place.⁵² Although its ban on recovered mixed paper covered all sectors, its application to plastics was more limited—targeting postconsumer recyclable plastics, rather than postindustrial recyclable plastics.⁵³ This targeted approach was possibly motivated by “wishful recycling”—where uneducated consumers are

⁴³ Paben, *supra* note 23.

⁴⁴ *National Sword 2017*, INSTITUTE OF SCRAP RECYCLING INDUSTRIES, INC., <http://perma.cc/D29C-8D68>.

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ Paben, *supra* note 23.

⁴⁸ PET (Polyethylene Terephthalate, Resin Identification Code #1), THE ASSOCIATION OF PLASTIC RECYCLERS (June 1, 2018), <http://perma.cc/8B6L-89J3>.

⁴⁹ Committee on Technical Barriers to Trade, *Notification: Catalogue of Solid Wastes Forbidden to Import into China by the End of 2017*, WTO DOC. G/TBT/N/CHN/1211 (July 18, 2017).

⁵⁰ Colin Staub, *China Says It Will Ban Certain Recovered Material Imports*, RESOURCE RECYCLING (July 19, 2017), <http://perma.cc/6PAZ-UPCM>.

⁵¹ Colin Staub, *New Inspections Further Slow Chinese Scrap Imports*, RESOURCE RECYCLING (July 11, 2017), <http://perma.cc/8S98-TYTK>.

⁵² *A Chinese Ban on Rubbish Imports is Shaking up the Global Junk Trade*, THE ECONOMIST (Sept. 29, 2018), <http://perma.cc/YR9U-LYHU> (referring to all of the Chinese restrictions as one program called “National Sword”).

⁵³ *Action Plan to Phase out Waste Imports*, THE STATE COUNCIL OF THE PEOPLE'S REPUBLIC OF CHINA (July 27, 2017), <http://perma.cc/4F7S-DZV5>. See also Colin Staub, *China Offers Clues on What Will (and Won't) Be Allowed In*, RESOURCE RECYCLING (Aug. 22, 2017), <http://perma.cc/P3P7-UAUT>.

overinclusive rather than underinclusive as to the different classes of recyclables, and add too many nonrecyclable materials to the recyclable materials.⁵⁴

On November 15, 2017, China submitted a series of Technical Barriers to Trade Notifications⁵⁵ to the WTO regarding further recyclables import restrictions. The notifications indicated that China would no longer accept recyclables if the shipment had any more than 0.5 percent contamination. That threshold was slightly more relaxed than the initially proposed limit of 0.3 percent but still significantly lower than the previous standard of 1.5 percent.⁵⁶ This 0.5 percent contamination restriction was implemented beginning March 1, 2018.⁵⁷ Given the fact that many shipments of recyclables had already been rejected due to the 1.5 percent contamination level previously in place, this 0.5 percent level is a serious barrier to U.S. recyclables sorters hoping to send their materials to buyers in China.

C. Blue Sky, 2018

On March 6, 2018, the Chinese government announced a program called Blue Sky that would be run by the General Administration of Customs.⁵⁸ The program was intended to run from March to December 2018 and appeared to be aimed at enforcing the previously mentioned contamination limits by attempting to further crack down on illegal smuggling of materials into China. This program, however, was solely focused on recyclables and waste materials imports rather than on smuggling generally.⁵⁹

On April 19, 2018, China made a further announcement banning additional categories of waste.⁶⁰ The announcement listed one set of materials to be banned by the end of 2018 and another to be banned by the end of 2019.⁶¹ Most wastes to be banned were not household recyclable wastes, but instead included notable

⁵⁴ Livia Albeck-Ripka, *6 Things You're Recycling Wrong*, N.Y. TIMES (May 29, 2018), <http://perma.cc/75KK-CP7A>.

⁵⁵ These are notifications that WTO members are required to submit to make other WTO members aware of new regulations that may affect trade. *Technical Barriers to Trade*, WORLD TRADE ORGANIZATION, <http://perma.cc/TB76-HTFB>.

⁵⁶ Staub, *supra* note 3. See also *Technical Barriers to Trade Information Management System*, WORLD TRADE ORGANIZATION, <http://perma.cc/8XQF-JUZZ> (a collection of TBT Notifications on the WTO's website).

⁵⁷ RESOURCE RECYCLING, *supra* note 1.

⁵⁸ Eminton, *supra* note 24.

⁵⁹ *Id.*

⁶⁰ China, Ministry of Ecology and Environment, *Announcement on Adjustment to the Catalogue for the Administration of Import Solid Waste* (Apr. 19, 2018). English Translation by the Institute of Scrap Recycling Industries available for reference: <http://perma.cc/6K9K-66AZ>.

⁶¹ *Id.*

categories like industrial waste and scrap plastics. The ban would also apply to metal and electric appliance scraps (both of which were banned by the end of 2018).⁶² The Ministry of Ecology and Environment (an agency created in March 2018 to succeed a previous environmentally focused Ministry) spokesman, Liu Youbin, stated that this restriction was a “key move to ensure environmental safety and protect public health.”⁶³

On May 28, 2018, the General Administration of Customs announced regulations scheduled to go into effect on June 1, 2018.⁶⁴ These regulations require a licensed independent inspector to examine every load of recyclable material to be exported to China, and to monitor the loading process.⁶⁵ Exporters at the time expected serious shortages of inspectors and cost increases related to paying for inspectors’ time.⁶⁶ However, the regulations are understandable from the Chinese perspective—if recyclables sorters are sending out shipments that end up being rejected by the customs officers in China, then it is possible that the ports will be clogged with rejected recyclables shipments, which take up space without contributing anything to the Chinese economy.

On July 11, 2018, China’s Ministry of Ecology and Environment released a draft proposal for a program that would completely ban imports of recovered fiber as well as all other forms of solid waste. Industry commentators had speculated about this regulation, but the suggested timeline was reportedly shorter than they expected.⁶⁷ The commentators had predicted that the regulations would be implemented closer to 2020, but this draft indicated that the implementation would potentially come sooner than industry speculation assumed.⁶⁸

⁶² *Id.*

⁶³ *UPDATE 1 – China Bans Imports of 16 More Scrap Waste Products from End – 2018 – Ministry*, REUTERS (Apr. 18, 2018), <http://perma.cc/97BY-A8ZY>.

⁶⁴ Implementation of the regulations was delayed until June 22, 2018. See China, *General Administration of Customs, Announcement No. 48 in 2018 (Public Announcement on Promulgating the Implementation Rules on the Supervision and Administration of Pre-shipping Inspection of Imported Solid Waste Used as Raw Materials)* (May 28, 2018). English translation by the Institute of Scrap Recycling Industries available for reference: <http://perma.cc/K9AZ-FRQ5>.

⁶⁵ *Id.*

⁶⁶ Colin Staub, *China Adds Another Hurdle for Exporters*, RESOURCE RECYCLING (June 26, 2018), <http://perma.cc/8BT3-4VLX>.

⁶⁷ Staub, *supra* note 25.

⁶⁸ *Id.*

D. Why the Restrictions Matter

1. China plays an enormous role in the global recycling process.

As previously stated, the recyclables trade has tended to gravitate towards shipping materials internationally rather than processing materials within their nation of origin. China plays an outsized role in handling the international flow of recyclables. It handled fifty-seven percent of the total amount of plastic waste imported globally in 2014.⁶⁹ This might be explained by the Chinese regulatory framework and existing trade flows. China has lower labor and regulatory costs than many other nations. Donald Lyons, professor of geography at University College Cork and Associate Editor for Industrial Symbiosis for the *Journal of Industrial Ecology*, states: “[t]o be economically viable, lower quality scrap needs to be manually sorted before it is ready to be recycled and this is only possible in low-income countries like China that have both a demand for scrap and an abundant supply of cheap labour (and lax environmental laws) to manually sort the scrap before reprocessing or re-refining it.”⁷⁰ Additionally, China’s large role in international trade means that existing shipping routes can be exploited to send waste cheaply from the U.S. to China. Lyons states:

[I]t is generally cheaper to transport scrap from Los Angeles across the Pacific ocean rather than ship it overland to a mill in Pennsylvania or Virginia – particularly now that recent advances in loading and crushing technology allow scrap to be safely and cheaply loaded onto the empty container vessels returning to China, having unloaded their cargo for American markets.⁷¹

These low costs have led to enormous U.S. dependence upon Chinese processing of waste. A report by the U.S. Trade Representative on China’s compliance with its accession agreement noted that the value of the goods exported by the U.S. to China that are prohibited under China’s outright ban on certain materials was \$479 million in 2016.⁷²

2. Other countries are no longer accepting displaced exports.

Many countries initially responded to the Chinese recyclables import restrictions by shipping recyclables elsewhere in the world. Again, the trend shifted towards shipping recyclable materials to developing rather than developed nations. For example, India’s imports of PE (polyethylene plastic) grew to 88,155

⁶⁹ Velis, *supra* note 4.

⁷⁰ Lyons, *supra* note 7, at 296.

⁷¹ *Id.* (citing Justin Fox, *21st-Century Scrap*, FORTUNE (May 15, 2006), <http://perma.cc/A3TW-WNS7>).

⁷² UNITED STATES TRADE REPRESENTATIVE, 2017 REPORT TO CONGRESS ON CHINA’S WTO COMPLIANCE 69 (2018), <http://perma.cc/2P5D-6CAS>.

metric tons in 2017 from 58,747 metric tons in 2016.⁷³ Other countries had even more drastic increases in imports—more than doubling the amount of PE coming through their ports. Vietnamese PE imports increased from 16,845 metric tons to 44,716 metric tons from 2016 to 2017.⁷⁴ Similarly, Malaysian PE imports grew from 16,277 to 37,778 metric tons; Taiwanese PE imports grew from 14,063 to 16,575 metric tons; and Thai PE imports grew from 1,041 to 10,153 metric tons (increasing over ten times!).⁷⁵

However, after being overwhelmed by the sheer volume of imports and the associated environmental costs, these countries have begun to implement their own recyclables import restrictions. The Malaysian government stopped issuing scrap plastic import permits on July 23, 2018.⁷⁶ Following close on Malaysia's heels, the Vietnamese government announced that it would no longer grant new licenses for waste material imports on July 25, 2018.⁷⁷ Subsequently, a group of Thai regulatory agencies adopted a resolution on August 15, 2018 that would ban the import of all electronic and plastic wastes (granting limited exceptions) within the following two years.⁷⁸ On August 13, 2018, the Taiwanese Environmental Protection Agency held a press conference and drafted regulations to restrict the import of waste plastics and papers in the future.⁷⁹ As a result, it is not immediately clear where these restricted recyclable material shipments can go. Further, it remains unclear whether the trend of nations accepting recyclables shipments and subsequently implementing aggressive restrictions limiting the flow of recyclables will continue.

3. U.S. companies involved in the recycling industry are being harmed.

Given their rapid implementation, the recycling restrictions imposed by China (and subsequent restrictions by other countries) have quickly had a large impact on the global recycling trade, including large effects on U.S. companies involved in the recyclables supply chain. While the first three quarters of 2017 were economically very successful for U.S. waste/recycling haulers, revenues dropped significantly in the last quarter of 2017—likely as a result of the further

⁷³ Staub, *supra* note 5.

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ Colin Staub, *Container Backlogs Cause More Import Strife in SE Asia*, RESOURCE RECYCLING (July 31, 2018), <http://perma.cc/67SJ-FZJF>.

⁷⁷ *Id.* See also Quang Minh, *supra* note 6.

⁷⁸ Pratch Rujivanarom, *Government to Ban Import of Electronic, Plastic Wastes*, THE NATION (Aug. 16, 2018), <http://perma.cc/QJX8-PW3V>.

⁷⁹ Colin Staub, *Markets Update: More Domestic Talk as Overseas Options Dwindle*, RESOURCE RECYCLING (Aug. 21, 2018), <http://perma.cc/3XEQ-5UXM>.

restrictions that China began to implement on recyclables imports.⁸⁰ The Chinese Minister of Environmental Protection Li Ganjie noted in a press conference on March 17, 2018 that the volume of solid waste imports to China dropped twelve percent in 2017 (and the restrictions were not even in place for the entire year).⁸¹

Chinese domestic recyclable materials have experienced large price increases while international recyclable material prices have fallen, likely due to artificial scarcity within China and artificial surplus abroad.⁸² In 2017 the price for Old Corrugated Cardboard (OCC) from the U.S. fell by nearly thirty-six percent to a low of \$93 per metric ton while Chinese domestic OCC prices soared to nearly \$500 per metric ton.⁸³ In April 2018, U.S. domestic OCC was trading for \$74 per ton, and industry leaders attributed the low prices to the enormous bargaining power that buyers had over sorting facilities because of the surplus of domestic supply resulting from reduced shipments to China.⁸⁴ In 2018, the largest residential North American hauling company (Waste Management) saw a nineteen percent decrease in revenue during the second quarter, while the second largest (Republic Services) saw a seven percent decrease, the third-largest (Waste Connections) saw a forty-eight percent decrease,⁸⁵ the fourth-largest (Advanced Disposal) saw a fifty-three percent decrease, and the fifth-largest (Casella Waste Systems) saw a forty-one percent decrease.⁸⁶ These decreased revenues have direct impacts on the companies being harmed, but they also have indirect impacts across the rest of the U.S. economy: jobs may be cut and spending and infrastructure investments at plants may decrease, and these effects ripple outwards.⁸⁷ While the indirect effects are likely to be large, but difficult to quantify, the direct economic impacts on recycling are large and more easily estimated. The

⁸⁰ Jared Paben, *China's Policies Whack Hauler Earnings in Late 2017*, RESOURCE RECYCLING (Feb. 27, 2018), <http://perma.cc/ZRL6-HQW4>.

⁸¹ *China's Solid Waste Imports Decline 12 Percent in 2017: Minister*, CCTV (Mar. 17, 2018), <http://perma.cc/8JBX-YVLF>.

⁸² Colin Staub, *Chinese Actions Tank US OCC Prices*, RESOURCE RECYCLING (Oct. 10, 2017), <http://perma.cc/HPY5-ZA4A>.

⁸³ *Id.*

⁸⁴ Colin Staub, *What Depressed OCC Means for the Recycling Industry*, RESOURCE RECYCLING (Apr. 10, 2018), <http://perma.cc/T4B8-5V4K>.

⁸⁵ Jared Paben, *Publicly Traded Haulers Report Commodity Price Pains*, RESOURCE RECYCLING (July 31, 2018), <http://perma.cc/5HL3-ND2H>.

⁸⁶ Jared Paben, *Depressed Fiber Prices Felt by Casella and Advanced*, RESOURCE RECYCLING (Aug. 7, 2018), <http://perma.cc/5H7M-XK6C>.

⁸⁷ For example, a recycling company in Montana was forced to cut its staff in response to decreased recyclable materials prices and in Florida a city suspended its recycling program entirely. *How Recycling is Changing in All 50 States*, WASTE DIVE (Feb. 1, 2019), <http://perma.cc/D4EW-CR8K>.

total value of the recyclable materials banned by the Chinese restrictions in 2016 alone has been estimated at \$479 million.⁸⁸

E. China in the WTO and its Relationship with the U.S.

Section 421 of the U.S.-China Relations Act of 2000⁸⁹ requires the U.S. Trade Representative (USTR) to annually prepare a report on China's compliance with its commitments under the WTO and any multilateral or bilateral treaties existing between the U.S. and China.⁹⁰ The 2017 USTR report stated that China's protectionist stance is "worse today than it was five years ago."⁹¹

The U.S. foreign trade deficit with East Asia has become a deficit in trade with China alone rather than a deficit with multiple East Asian nations. In 2015, the East Asia share of the U.S. global trade deficit was sixty-seven percent, and it was sixty-eight percent twenty years prior.⁹² However, from 2000 to 2015 the U.S.'s trade deficit with China grew by nearly \$300 billion (from \$83 billion to \$366 billion, an increase of over 440 percent), meaning that China provides a significantly larger proportion of goods to the U.S. Most recently, the USTR's report on China's compliance with its accession agreements to the WTO stated that the 2017 goods trade deficit between the U.S. and China was expected to reach \$365 billion by the end of the year.⁹³

U.S. trade dialogue with China began with the U.S.-China Joint Commission on Commerce and Trade (JCCT) in 2003.⁹⁴ In 2006, the U.S.-China Strategic Economic Dialogue (SED) was created to occur in parallel with the JCCT. Then the SED was replaced by the U.S.-China Strategic and Economic Dialogue (S&ED) in 2009. Finally, in 2017 the U.S.-China Comprehensive Economic Dialogue replaced the JCCT and the S&ED.⁹⁵ Although these trade dialogues are ongoing, it is unlikely that the issues created by the recycling restrictions can be solved through dialogue alone.

⁸⁸ UNITED STATES TRADE REPRESENTATIVE, *supra* note 72, at 69.

⁸⁹ Pub. L. No. 106-286, codified at 22 U.S.C. § 6901 *et seq.* (West 2000).

⁹⁰ 22 U.S.C. § 6951(a) (2018).

⁹¹ UNITED STATES TRADE REPRESENTATIVE, *supra* note 72, at 2.

⁹² US-China Business Council, *China's Implementation of its World Trade Organization Commitments*, Written Testimony in Response to US Trade Representative's Request for Comments and Notice of Public Hearing Concerning China's Compliance with WTO Commitments (81 Fed. Reg. 54,646) (Sept. 21, 2016), <http://perma.cc/SAT7-86RJ>.

⁹³ UNITED STATES TRADE REPRESENTATIVE, *supra* note 72, at 4.

⁹⁴ Although the Commission was founded in 1983, it was not "elevated" to be a discussion forum until 2003. *Id.* at 3.

⁹⁵ *Id.*

The current “trade war” between the U.S. and China makes addressing and solving the problems presented by these restrictions through talks and WTO comments alone unlikely. China and the U.S. have gone through multiple back-and-forth tariff increases since the end of 2017, with tariffs in place on everything from solar panels to steel to soybeans.⁹⁶ As of October 22, 2018, the U.S. has imposed tariffs worth up to \$250 billion, and the Chinese government has imposed tariffs worth \$60 billion.⁹⁷ On August 23, 2018, China requested consultations with the U.S. through the WTO (the first step in the WTO’s dispute resolution procedure) in response to the tariffs that the U.S. has put in place.⁹⁸ Furthermore, a representative of the Chinese People’s Political Consultative Conference, a legislative body aimed at building alliances with other countries, stated that the country was not afraid of a trade war with the U.S. and that China has simply taken necessary counteractions to respond to U.S. aggression.⁹⁹ Such statements, and such high economic stakes, make it unlikely that the two countries will be able to reach an agreement on the recyclables restrictions China currently has in place while also facing trade war tensions.

III. LEGAL BACKGROUND

China’s domestic laws and international obligations provide context for examining these restrictions, and its obligations as a WTO member are a potential avenue for the U.S. to attack the restrictions. China’s environment is in a precarious condition, and its domestic environmental law regime has not achieved a sufficient level of environmental protection. This could indicate either that the government needs to incorporate international restrictions into its environmental protection scheme, or that environmental protection may be a pretextual justification for trade restrictions. As a member of the WTO, China is bound by the treaties that bind other WTO members, including the GATT.¹⁰⁰ The GATT prohibits certain trade restrictions, and could be an avenue through which the U.S. could challenge the Chinese restrictions. The Chinese government has also discussed the Basel Convention, an international treaty intended to limit the movement of hazardous waste between nations, in conjunction with its

⁹⁶ Chad P. Brown & Melina Kolb, *Trump’s Trade War Timeline: An Up-To-Date Guide*, PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS (Sept. 24, 2018), <http://perma.cc/4BWX-6YHZ>.

⁹⁷ Schwartz, *supra* note 14.

⁹⁸ Requests for Consultations by China, *United States – Tariff Measures on Certain Goods from China II*, WTO DOC. WT/DS565/1, G/L/1260 (Aug. 27, 2018).

⁹⁹ *Id.*

¹⁰⁰ Marrakesh Agreement Establishing the World Trade Organization, Apr. 15, 1994, 1867 U.N.T.S. 154, art. 2 ¶ 2 (stating that all agreements included in Annex 1, which includes the GATT, bind all WTO members).

restrictions. However, since the U.S. has not ratified the Convention, it is unlikely to protect the Chinese restrictions from U.S. challenges.

A. Chinese Environmental Issues and Environmental Law

Chairman Mao Zedong's often-cited approach to environmental issues during his time as China's leader was that man must conquer nature, with no apparent concern for the environmental costs associated with such conquest.¹⁰¹ That policy-backed laissez-faire approach to the environmental externalities of economic productivity led to severe environmental degradation during Mao's time and beyond.¹⁰² Commenters have noted that China currently maintains many environmentally-harmful policies while still grappling with severe issues of pollution and environmental damage.¹⁰³ In 1997, the World Bank published a study finding that China's mid-1990s air and water pollution alone cost the country more than \$32.3 billion due to premature deaths, morbidity, restricted activity, and other negative health effects.¹⁰⁴ Those astronomical costs were estimated without taking into account the direct impacts on the environment that do not also impact human health.¹⁰⁵

While many of the policies that have caused harm to China's environment are not in the waste sector, commentators have noted that China's historical approach to waste imports (freely accepting them and lax inspection of waste shipments) has also led to severe environmental degradation.¹⁰⁶

The National People's Congress (NPC) is the highest legislative body in China, and its standing committee can enact and amend all fundamental laws with

¹⁰¹ Robert V. Percival, *China's Green Leap Forward toward Global Environmental Leadership*, 12 VT. J. ENVTL. L. 633, 636 (2011).

¹⁰² Jackson Ewing, *Tough Tasks for China's New Environment Ministry*, THE DIPLOMAT (Mar. 17, 2018), <http://perma.cc/D6XF-X39N>; Yanzhong Huang, *Tackling China's Environmental Health Crisis*, COUNCIL ON FOREIGN RELATIONS (May 14, 2015), <http://perma.cc/7C2N-U4HE>.

¹⁰³ Stephanie Beyer, *Environmental Law and Policy in the People's Republic of China*, 5 CHINESE J. INT'L L. 185, 187 (2006).

¹⁰⁴ THE WORLD BANK, CLEAR WATER, BLUE SKIES: CHINA'S ENVIRONMENT IN THE NEW CENTURY 23 (1997), <http://perma.cc/AR3M-H5SV>.

¹⁰⁵ *Id.* at 7 ("Because air and water pollution are the most damaging to human health, worker productivity, and agricultural output, they are the focus of this report.").

¹⁰⁶ Yuhong Zhao, *Trade and Environment: Challenges after China's WTO Accession*, 32 COL. J. ENVTL. L. 41, 45-46 (2007).

China has also paid a high environmental cost for accepting waste imports and relocation of polluting industries from developed countries. The importation of waste started long before the 1980s and reached its peak level in the mid-1990s when the Chinese government finally recognized the irreversible environmental harm of such trade and strengthened its solid waste management law to control and prohibit the import of waste.

the exception of fundamental national statutes.¹⁰⁷ The standing committee of the NPC passed China's first environmentally-focused statute, the Environmental Protection Law, in 1979 as a trial statute.¹⁰⁸ It was later amended and codified without "trial" status in 1989, but remained vague in its language about environmental protection, asserting goals rather than setting out specific requirements.¹⁰⁹

The Environmental Protection Law's vagueness appears to be a common theme in Chinese environmental law. Commentators have noted that Chinese environmental laws often seem to be more aspirational than setting strict standards, frequently due to technological limitations.¹¹⁰ In addition to the difficulty that polluters face in meeting the standards that China has imposed through its environmental laws, industries have also at times found that it is more economical to pollute and pay a fee rather than clean up their pollutants.¹¹¹

This state of affairs potentially reveals that the Chinese government has to use international trade restrictions to achieve environmental protection because of its failed domestic policy. However, it could also be read to indicate that the country values economic growth over environmental protection and that the restrictions' environmental justifications are pretextual.

B. International Trade Law Governing This Issue

China gained approval to join the WTO on November 10, 2001 and joined the WTO on November 11, 2001.¹¹² By joining the WTO, China became subject

¹⁰⁷ Richard J. Ferris Jr., Hongung Zhang, *Reaching out to the Rule of Law: China's Continuing Efforts to Develop an Effective Environmental Law Regime*, 11 WM. & MARY BILL RTS. J. 569, 576 (2003).

¹⁰⁸ *Id.* at 582.

¹⁰⁹ Charles McElwee, *Shaping China's Green Laws*, CHINADIALOGUE (July 22, 2011), <http://perma.cc/AY6R-FEUK>.

¹¹⁰ Ferris, *supra* note 107, at 599.

In a number of situations, compliance with Chinese environmental laws requires access to sophisticated infrastructure that does not exist, or does not exist in sufficient quantity and quality... This particular situation is indicative of what may be a slightly 'aspirational' approach to the drafting of environmental laws. This approach disregards the immediate practicability of the law in question in favor of targets that are environmentally attractive, but largely unattainable using existing infrastructure or technology.

¹¹¹ Zhao, *supra* note 106, at 75.

A pollution charge mechanism has been in place since 1979 when China's first piece of national environmental legislation, the Environmental Protection Law (for trial use), was enacted. It has not, however, effectively tackled China's pollution problem because charges imposed have been far below the cost of pollution treatment, and enterprises have chosen to pollute and pay charges rather than take environmental protection measures to minimize pollution.

¹¹² UNITED STATES TRADE REPRESENTATIVE, *supra* note 72.

to the same obligations that bind all other WTO members. China's accession protocol states that the country must "ensure that the same technical regulations, standards and conformity assessment procedures are applied to both imported and domestic products."¹¹³ Annex 1A of China's Accession Protocol requires that China provide information on the "repeal and cessation of all WTO inconsistent laws, regulations and other methods on national treatment."¹¹⁴ "National treatment" refers to the practice of treating goods from foreign nations the same way that similar domestic goods are treated.¹¹⁵ By acceding to the WTO, China also agreed to comply with all of the restrictions on trade barriers that are contained in the General Agreement on Tariffs and Trade (GATT).

1. The GATT provides limited exceptions for otherwise WTO-incompatible trade restrictions.

The General Agreement on Tariffs and Trade is an international legal agreement that preceded the WTO but remains in force as binding upon all WTO members.¹¹⁶ The GATT imposes three primary rules. First, countries must treat products from all countries equally. Second, countries must treat foreign products the same way that similar domestic products are treated (that is, national treatment). Third, countries cannot impose other types of restrictions on products (like quotas and licensing schemes) that would change the conditions of competition.¹¹⁷

GATT Article XX provides exceptions for some restrictions on trade that would otherwise be prohibited under the GATT.¹¹⁸ Only the exception under Article XX(b) is relevant here, so this Comment will focus on that subsection.¹¹⁹ Article XX(b), which can be referred to as the environmental exception, creates

¹¹³ World Trade Organization, *Protocol on the Accession of the People's Republic of China*, WTO DOC. WT/L/432, 13 – Technical Barriers to Trade, ¶ 4(a).

¹¹⁴ World Trade Organization, *Protocol on the Accession of the People's Republic of China, Annex 1A: Information to be Provided by China in the Context of the Transitional Review Mechanism*, WTO DOC. WT/L/432, II Economic Policies, ¶ 1(a).

¹¹⁵ Peter M. Gerhart & Michael S. Baron, *Understanding National Treatment: The Participatory Vision of the WTO*, 14 IND. INT'L & COMP. L. REV. 505 (2004).

¹¹⁶ Wold, *supra* note 16.

¹¹⁷ *Id.* See also GATT, *supra* note 15.

¹¹⁸ GATT, *supra* note 15, at art. XX.

¹¹⁹ XX(g) is the only other exception under Article XX that deals with environmentally motivated restrictions. However, XX(g) only covers restrictions put in place to conserve exhaustible natural resources. China has not indicated its restrictions are motivated by any desire to conserve natural resources (and restrictions on recyclable material imports are arguably antithetical to conserving natural resources).

an exception for regulations that are “necessary to protect human, animal or plant life or health.”¹²⁰

Qualifying for the exception under Article XX(b) requires proof that first, the regulation would protect human, animal or plant life, and second, that the regulation is *necessary* to do so. Because of the way that “necessary” has been defined in WTO Appellate Body case law, it seems harder to prove necessity than to prove that the regulation would protect life or health.¹²¹ “Necessary” has been interpreted to mean that the proponent of the regulation must show that no WTO-compatible or less-restrictive regulation exists that was reasonably available to pursue the country’s desired policy goal.¹²²

2. The Basel Convention governs many U.N. members’ trade in waste, but does not bind the U.S.

Li Ganjie, China’s Minister of Environmental Protection, mentioned in a 2018 press conference that China’s bevy of recycling restrictions could potentially be seen as an attempt to follow the spirit of the Basel Convention and push each country to deal domestically with the hazardous waste produced within its borders.¹²³ The Basel Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal was first opened for signature on March 22, 1989 and ultimately entered into force on May 5, 1992.¹²⁴ The Convention generally deals with movement of hazardous waste and is specifically aimed at preventing the transfer of hazardous waste to countries classified as “developing.”¹²⁵ The U.S. and Haiti are the only two countries that have signed the Basel Convention but have not ratified, accepted, approved, or acceded to

¹²⁰ GATT, *supra* note 15, at art. XX(b).

¹²¹ The Japanese Ministry of Economy, Trade, and Industry has produced a report in which it breaks down the success and failure of suits in which countries have attempted to use Article XX(b). There is one instance in which a country met the burden of proof for health effects and failed to meet the burden of proof for necessity. Conversely, there have been no instances in which a country was able to meet the burden of proof for necessity and not meet the burden of proof for health effects. Although this information is limited, it suggests that it is easier to meet the burden of proof for health effects than it is to meet the burden for necessity. *2016 Report on Compliance by Major Trading Partners with Trade Agreements*, Part II Chapter 4: “Justifiable Reasons,” JAPANESE MINISTRY OF ECONOMY TRADE AND INDUSTRY, 334, Figure II-4-5 (2016), <http://perma.cc/29P4-M3DL>.

¹²² Joel P. Trachtman, *WTO Trade and Environment Jurisprudence: Avoiding Environmental Catastrophe*, 58 HARV. INT’L L. J. 273, 291 (2017).

¹²³ CCTV, *supra* note 81.

¹²⁴ Christine Terada, *Recycling Electronic Wastes in Nigeria: Putting Environmental and Human Rights at Risk*, 10 NW. U. J. INT’L HUM. RTS. 154 (2012).

¹²⁵ Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, *opened for signature* Mar. 22, 1989, 28 I.L.M. 657.

it.¹²⁶ The U.S. did not sign the Convention until 1990, and the Convention has never gone into force for the U.S. Thus, although China could potentially cite the Basel Convention as justification for its restrictions, it would be unable to use the Convention to counter a U.S. attack on the restrictions because the Convention does not bind the U.S.¹²⁷

IV. POTENTIAL WTO SUIT AND RAMIFICATIONS

WTO case law makes it likely that the U.S. would win a WTO dispute if it decided to file suit against China to challenge the restrictions. China's restrictions likely violate the national treatment requirement of the GATT.¹²⁸ It is unlikely that China would be able to surmount the multiple barriers to establishing a claim that its restrictions are covered by the Article XX(b) exception to the GATT's general requirements. Thus, China would likely not be able to defend its restrictions in a WTO dispute.

There are many costs associated with the U.S. filing a suit in the WTO, and the costs likely outweigh the benefits, even if the U.S. would likely win the suit. Costs include diplomatic fallout with China, as well as economic retaliation. Furthermore, its suit could be seen as environmental imperialism by attempting to force China to accept the U.S.'s waste just as China is attempting to clean up its environment. Additionally, China may not comply with a WTO decision even if the U.S. wins.¹²⁹

¹²⁶ *Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal*, SECRETARIAT OF THE BASEL CONVENTION, <http://perma.cc/36MX-FD73>.

¹²⁷ The Vienna Convention states that every treaty in force "is binding upon the parties to it." Vienna Convention on the Law of Treaties art. 26, *opened for signature* May 23, 1969, 1155 U.N.T.S. 331. Interestingly, the U.S. is not a party to the Vienna Convention, but China is, so it would likely be bound by this convention even in attempting to push against a non-party. Furthermore, that provision of the Convention is a customary international law called *pacta sunt servanda*, and such customary laws would bind the U.S. and China. Josef L. Koons, *The Meaning and the Range of the Norm Pacta Sunt Servanda*, 39 AM. J. INT'L L. 180, 181 (1945).

¹²⁸ China has just begun to require separating trash and recycling, which is a far lower standard than the standard to which international recyclable imports are held. Brian Taylor, *China's MEP Announces Mandatory Recycling Intentions*, RECYCLING TODAY (Jan. 2, 2018), <http://perma.cc/CL8E-NG5S>.

¹²⁹ China has previously failed to comply with a WTO decision in a dispute between the U.S. and China. See Report of the Panel, *China – Anti-dumping and Countervailing Duty Measures on Broiler Products from the United States: Recourse to Article 21.5 of the DSU by the United States*, WT/DS427/RW (Jan. 18, 2018), 125–26.

A. WTO Suit

1. The Chinese restrictions potentially violate the GATT.

The E.U. and the U.S. have responded to China's restrictions with letters and statements to the WTO, arguing that the restrictions were implemented too quickly and could result in waste diversions that are ultimately worse for the environment.¹³⁰ Both countries alluded to the apparent disparity in placing such restrictions on international shipments of recyclables without placing the same restrictions on domestic recyclables.¹³¹ The Chinese government responded via the WTO on July 4, 2018, stating that at least one goal of the measures was to ensure that each country processes waste within its own border.¹³² Additionally, the Institute of Scrap Recycling Industries provided a letter attributed to the Chinese government responding to U.S. concerns in more detail.¹³³ The letter cited Chinese concerns for protecting a degraded environment as a major factor behind the restrictions. It also stated that the restrictions do not violate China's national treatment requirement since the standards are merely border measures regarding importation and thus could not be applied to domestic products.¹³⁴

If the U.S. were to challenge the Chinese restrictions via the WTO, the best method would be arguing that these restrictions violate the national treatment requirement.¹³⁵ To do so, the U.S. would first establish that, for recycling purposes, Chinese recyclables are similar to recyclables coming from other countries.¹³⁶ Next, it would establish that the Chinese government has placed stringent restrictions and requirements on international shipments of

¹³⁰ Statement by the European Union to the Committee on Technical Barriers to Trade 21 and 22 March 2018, *China – Chinese Environmental Protection Control Standards for Imported Solid Waste as Raw Materials*, G/TBT/W/472 (Apr. 16, 2018); Statement by the United States to the Committee on Technical Barriers to Trade 21 and 22 March 2018, *China – Chinese Environmental Protection Control Standards for Imported Solid Waste as Raw Materials*, G/TBT/W/468 (Mar. 21, 2018).

¹³¹ *Id.*

¹³² Statement by China to the Committee on Technical Barriers to Trade 20 and 21 June 2018, *China – Chinese Environmental Protection Control Standards for Imported Solid Waste as Raw Materials*, G/TBT/W/547 (July 4, 2018).

¹³³ Colin Staub, *China: Waste Restrictions Will Spur U.S. Job Growth*, RESOURCE RECYCLING (June 19, 2018), <http://perma.cc/9NDR-PA6F>.

¹³⁴ Letter from Chinese WTO TBT Representative to US WTO TBT Representative, translated and provided by the Institute of Scrap Recycling Industries, <http://perma.cc/462X-LCHT>.

¹³⁵ The GATT, which applies to “products,” would cover imports of recyclable materials as shipments of commodities; there are product codes for recyclable materials under the Harmonized Commodity Description and Coding Systems. *See, for example*, “Harmonized Systems Code 3915,” FOREIGN TRADE ONLINE, <http://perma.cc/DYV6-KHYU>.

¹³⁶ For example, the Old Corrugated Cardboard being traded in China is the same as that being traded in the U.S. The only difference is their price. *See* Staub, *supra* note 82.

recyclables.¹³⁷ Finally, it would establish that China has not implemented the same stringent restrictions and requirements upon its domestic recyclables.¹³⁸ Framed this way, the restrictions may violate the national treatment requirement, especially because commentators have read WTO Appellate Body case law as interpreting the GATT's prohibition on measures violating national treatment broadly. For example, Ming Du writes that the case law seems to classify as violating national treatment any negative impact on imports without a negative impact on domestic products, without looking at the regulatory purpose of the action.¹³⁹ Given the potential violation of the GATT, China would have to prove that its restrictions fall under some sort of exception. The most likely exception for the restrictions, given their characterization as environmental protection regulations, is Article XX(b).

2. WTO Appellate Body case law sets high standards for GATT exceptions.

Any country hoping to meet the XX(b) exception will be subject to the test laid out by the WTO Appellate Body in *China – Publications and Audiovisual Products*.¹⁴⁰ In his analysis of WTO jurisprudence regarding necessity, Joel Trachtman writes that the WTO Appellate Body decision in *China – Publications and Audiovisual Products* combined a multifactor test from one case with a procedure developed in another case.¹⁴¹ The factors that the Appellate Body has directed Dispute Resolution Panels to consider originated in the decision in *Korea – Various Measures on Beef*. In a later opinion, *US – Gambling*, the Appellate Body laid out a set of procedures that Panels should take when considering whether the disputed provisions are “necessary.”¹⁴² By combining the procedural and substantive steps from these two cases, the decision in *China – Publications and Audiovisual Products* set a high bar for countries attempting to meet the necessity exception.

¹³⁷ Discussing China's stringent contamination and inspection standards should be sufficient, though depending upon when the U.S. files its suit, China may have already implemented total bans on international recyclable shipments. See Staub, *supra* note 25.

¹³⁸ China has only recently begun requiring municipalities to collect recycling separate from garbage, which seems to be a far lower standard than requiring that recycling be virtually uncontaminated. Taylor, *supra* note 128.

¹³⁹ Ming Du, ‘Treatment No Less Favorable’ and the Future of National Treatment Obligation in GATT Article III:4 after EC – Seal Products, 15 WORLD TRADE REV. 139, 163 (2015).

¹⁴⁰ Appellate Body Report, *China–Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products*, ¶¶ 238–42, WTO DOC. WT/DS363/AB/R (adopted Jan. 19, 2010).

¹⁴¹ Trachtman, *supra* note 122, at 292–93.

¹⁴² Appellate Body Report, *United States–Measures Affecting the Cross-Border Supply of Gambling and Betting Services*, ¶¶ 306–11, WTO DOC. WT/DS285/AB/R (adopted Apr. 7, 2005).

The analysis begins with the *Korea – Various Measures on Beef*¹⁴³ factors. Trachtman describes these factors as: (1) how much the measure will contribute towards achieving the desired compliance, (2) the importance of the common interests or values protected by the regulation, and (3) the impact of the law on imports or exports.¹⁴⁴ The Appellate Body has stated that the three factors must be balanced against each other.¹⁴⁵ Each factor is weighed according to the magnitude of its effect, without any single factor being dispositive.¹⁴⁶

Importantly, *Korea – Various Measures on Beef* deals with the definition of “necessary” under XX(d). However, since the language of necessity is the same in (d) and (b), Trachtman asserts that the interpretation of this word in section (d) is the same as the interpretation in section (b).¹⁴⁷ The WTO Analytical Index for Article XX supports this conclusion.¹⁴⁸ This three-factor analysis is then incorporated into the procedure the WTO Appellate Body laid out in *US – Gambling*.

Trachtman’s analysis of *US – Gambling* states that the procedure is as follows: first, the proponent of the regulation must make a *prima facie* case that the regulation is necessary under the *Korea – Various Measures on Beef* factors.¹⁴⁹ Second, the complaining party has the opportunity to lay out alternative, potentially less-trade-restrictive measures that the proponent of the regulation could have taken instead of the measures that are currently in place.¹⁵⁰ Third, the proponent of the regulation has the opportunity to prove that the proposed alternative does not meet the goal of the challenged regulation or is not reasonably available.¹⁵¹ Because the decision in *China – Publications and Audiovisual Products* required the factors from *Korea – Various Measures on Beef* as well as the procedure from *US – Gambling*, China

¹⁴³ Appellate Body Report, *Korea-Various Measures on Beef*, WTO Doc. WT/DS161/AB/R./WT/DS169/AB/R (adopted Dec. 11, 2000).

¹⁴⁴ Trachtman, *supra* note 122, at 291 (citing Appellate Body Report, *Korea-Various Measures on Beef*, WTO Doc. WT/DS161/AB/R./WT/DS169/AB/R (adopted Dec. 11, 2000)).

¹⁴⁵ Appellate Body Report, *Brazil – Measures Affecting Imports of Retreaded Tyres*, ¶ 182, WTO Doc. WT/DS332/AB/R (adopted Dec. 3, 2007).

¹⁴⁶ *Korea-Various Measures on Beef*, *supra* note 143, at ¶¶ 162–63.

¹⁴⁷ Trachtman, *supra* note 122, at 290–91 (citing Appellate Body Report, *Korea-Various Measures on Beef*, WTO Doc. WT/DS161/AB/R./WT/DS169/AB/R (adopted Dec. 11, 2000)).

¹⁴⁸ *GATT 1994 – Article XX (Jurisprudence)* in WTO Analytical Index: Guide to WTO Law and Practice, 11.

¹⁴⁹ Trachtman, *supra* note 122, at 292 (citing Appellate Body Report, *United States-Measures Affecting the Cross-Border Supply of Gambling and Betting Services*, ¶¶ 306–11, WTO Doc. WT/DS285/AB/R (adopted Apr. 7, 2005)).

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

would be subject to this dual scrutiny if required to defend its recyclables import restrictions against accusations by the U.S. that they violate the GATT.

Trachtman subsequently cites the Appellate Body's decision in *Brazil – Retreaded Tyres* as an example of the Appellate Body using this approach but failing to get an accurate understanding of the potential impacts of different measures on human health and to engage in balancing the required considerations against each other when determining necessity.¹⁵² It is not apparent whether this failure benefits the proponent of a regulation or the challenger, which makes the outcome potentially more uncertain than the case law would suggest on its face.

Even if China were to successfully navigate the procedures for showing its regulations were “necessary,” proving that a trade measure falls under the exception from Article XX(b) is a two-step process.¹⁵³ First, the WTO Panel will determine if the regulation falls under XX(b) (using the process laid out above). Next, the Panel will ask if the regulation violates the *chapeau* (an introductory paragraph that sets certain backstop requirements for GATT exceptions)¹⁵⁴ of Article XX. The *chapeau* requires that the measure in question does not “constitute a means of arbitrary or unjustifiable discrimination” and also is not a “disguised restriction on international trade.”¹⁵⁵ This *chapeau* provision essentially acts as a backstop to prevent a country from asserting an ostensibly acceptable justification for an otherwise prohibited regulation.

B. Likely Outcome of WTO Dispute

The Chinese government's communications regarding the various recycling restrictions make it seem as though China is confident it would win a WTO dispute regarding the restrictions' potential violation of the GATT. However, it actually appears more likely that the U.S. could convince the WTO otherwise. The effects and implementation of the restrictions, together with the difficulty in meeting the exception requirements for Article XX(g) of the GATT, make it unlikely that China would succeed.

The Chinese government also does not seem to acknowledge the difficulty of attempting to argue that their restrictions fall under the Article XX(b) exception to the GATT. It would be difficult to argue that the restrictions are strictly necessary to protect human, animal or plant life, or health (as required under

¹⁵² *Id.* at 293 (citing Panel Report, *Brazil-Measures Affecting Imports of Retreaded Tyres*, WTO Doc, WT/DS332/R (adopted Dec. 17, 2007), as modified by Appellate Body Report WT/DS332/AB/R).

¹⁵³ *Id.* at 290.

¹⁵⁴ *WTO Rules and Environmental Policies: GATT Exceptions*, WORLD TRADE ORGANIZATION, <http://perma.cc/6CCW-6LKU> (last visited Feb. 15, 2019).

¹⁵⁵ GATT, *supra* note 15, at art. XX.

Article XX(b)).¹⁵⁶ While imported waste can certainly pose a danger to human and environmental health, its negative effects can potentially be prevented by imposing stricter safety requirements on firms storing or processing that waste.¹⁵⁷ Furthermore, the health risks might be considered too minor to justify the restrictions as necessary. In *European Communities – Asbestos*,¹⁵⁸ the WTO Appellate Body held that the French restrictions on chrysotile asbestos imports were “necessary” under Article XX(b) because of the serious health risks associated with the material such as lung cancer, mesothelioma, and asbestosis.¹⁵⁹ The health risks that come from some types of contaminated recyclables shipments (for instance, a shipment of plastic bottles with some pizza boxes mixed in) are likely to be too minor in comparison to the health risks that were held to be sufficient in *European Community – Asbestos*. The risks of the recycling industry in China seem more concentrated in the *processing* of recyclable materials, rather than from the materials themselves. News stories telling of unventilated spaces where workers wear no protection and caustic chemicals and melting plastic abound.¹⁶⁰ These situations pose serious health risks, but the risks are arguably not due to *contaminated shipments* but rather due to insufficient worker protections. Thus, if the Chinese government is attempting to protect human health, it should do so by implementing regulations on recyclables *processing*, rather than recyclables *shipments*.

It would also be difficult for China to argue that the restrictions, even if necessary, do not violate the *chapeau* of Article XX.¹⁶¹ As will be discussed following an examination of Article XX(b)’s requirements, the *chapeau* requires that a restriction not be a disguised restriction on trade.¹⁶² It is possible that a WTO Panel would find the restrictions were actually disguised restrictions on trade because of China’s inconsistent environmental protection, as well as the economic benefits potentially accruing from these restrictions.

¹⁵⁶ *Id.* at art. XX(g).

¹⁵⁷ For example, requiring waste processing firms to store waste in enclosed spaces would prevent the waste being carried from the site by natural forces and harming plant or animal life. Containment requirements could prevent leachate (liquid that has percolated through a collection of waste and carries some constituents of the waste) from spreading and contaminating groundwater.

¹⁵⁸ Appellate Body Report, *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, WTO Doc. WT/DS135/AB/R (adopted Mar. 12, 2001).

¹⁵⁹ *Id.* at ¶ 192.

¹⁶⁰ See, for example, Adam Minter, *Plastic, Poverty, and Pollution in China’s Recycling Dead Zone*, THE GUARDIAN (July 16, 2014), <http://perma.cc/2P7L-7V2Y>.

¹⁶¹ GATT, *supra* note 15, at art. XX.

¹⁶² Sanford Gaines, *The WTO’s Reading of the GATT Article XX Chapeau: A Disguised Restriction on Environmental Measures*, 22 U. PA. J. INT’L ECON. L. 739, 744 (2001).

1. The restrictions' impacts on imports make an exception under XX(b) unlikely.

Of the three factors that must be considered when determining whether a measure is necessary—(1) effect on imports, (2) likelihood that the restrictions will achieve compliance, and (3) the importance of the value being protected—the restrictions' impacts on imports (factor 1) are likely to cut strongly against China. When balancing the factors, each factor must be weighted according to the magnitude of its impact.¹⁶³ China has readily discussed the severe impact that these restrictions have had on the import of recyclable materials to China—citing a 12 percent drop in recyclables imports for the year of 2017 despite the restrictions not being in place for much of the year.¹⁶⁴ It has been estimated that the plastic waste displaced from 2018 to 2030 will be 47 percent of all plastic waste that has been imported since 1988.¹⁶⁵ Furthermore, in its database tracking the impacts of the restrictions on the U.S., Waste Dive (a U.S.-based waste industry publication) has found that the economic and regulatory effects are strong in thirteen states, noticeable in twenty eight, and minimal in only nine states.¹⁶⁶ The other two factors are less clear-cut, but even if the WTO finds that the remaining factors support China's restrictions it is possible that factor 1's severe negative impacts will outweigh any support factors 2 and 3 can provide for the restrictions.

2. The uncertainty of success may cut against an Article XX(b) exception.

The other two factors potentially favor China, but they are harder to quantify and seem potentially insignificant compared to the negative impacts on imports. Regarding the compliance achieved (factor 2), it is likely that there are fewer imports of contaminated recyclables coming into China because there are fewer recyclables coming in generally.¹⁶⁷ It is not clear that the waste stream flowing to Chinese recycling facilities is any cleaner, since there is no indication that the same contamination restrictions have been placed on domestic recyclables.¹⁶⁸ The E.U.

¹⁶³ *Korea-Various Measures on Beef*, *supra* note 143, at ¶¶ 162–63.

¹⁶⁴ CCTV, *supra* note 81.

¹⁶⁵ Brooks, *supra* note 13.

¹⁶⁶ *What Chinese Import Policies Mean for All 50 States*, WASTE DIVE (Nov. 1, 2018), <http://perma.cc/MN3T-Y6ZR>.

¹⁶⁷ CCTV, *supra* note 81.

¹⁶⁸ Taylor, *supra* note 128. In 2016, China imported roughly 7.35 million metric tons of recyclable plastics and generated an estimated nearly 61 million metric tons of recyclable plastics. Brooks et al., *Supplementary Materials*, *supra* note 36, at Table S4. Thus, if the Chinese government wanted to ensure it had the greatest impact on reducing contamination in recycling, it would make sense for the government to also place restrictions on domestic recyclables.

specifically asked China to inform the members of the WTO what the domestic regulations for recyclables contamination were, and has received no response.¹⁶⁹

It is also possible that these restrictions will lead to fewer overflowing waste piles because the volume of contaminated waste will be reduced and thus the feedstock for the waste piles would be reduced. However, without an initial understanding of the prevalence of such piles it is hard to say that there is an actual numeric difference. Furthermore, since at least some of the contaminated recyclables shipments were smuggled in, it is impossible to tell whether these restrictions have led to any change in illegal imports of recyclables. (In fact, it is possible that more recyclables exporters have turned to smuggling and increased the flow of illegal shipments.)¹⁷⁰ The Chinese government has claimed that the programs have been successful—reporting that they have captured 110,000 tons as of April 2018¹⁷¹—but since it is impossible to know how many smuggled shipments have been successfully imported, it would be invalid to assert that the programs are definitely successful. As a result, it is not necessarily apparent that these restrictions have achieved or will achieve their stated environmental protection goals.

3. China's environmentally harmful policy may contradict its supposed interest in protection.

Regarding the importance of the value being protected, the Chinese government has indicated that these restrictions are intended to protect the Chinese environment and to encourage local management of waste.¹⁷² Both of these values are laudable and important. However, since the restrictions have apparently not been implemented on domestic wastes, it appears that the government has not fully committed to protecting the values it has espoused.¹⁷³ Furthermore, the aspirational nature of many Chinese domestic environmental laws, as previously discussed, may further indicate a lack of commitment to environmental protection. That may negatively impact whether the WTO weighs this factor in favor of China because it could indicate that the values being asserted here are not truly the interest China is attempting to protect.

¹⁶⁹ Statement by the European Union to the Committee on Technical Barriers to Trade 21 and 22 March 2018, *China – Chinese Environmental Protection Control Standards for Imported Solid Waste as Raw Materials*, G/TBT/W/472 (Apr. 16, 2018).

¹⁷⁰ *China Customs Seizes 110,000 Tonnes of Smuggled Waste This Year*, SOUTH CHINA MORNING POST (Apr. 3, 2018), <http://perma.cc/R8MV-UYCH>.

¹⁷¹ *Id.*

¹⁷² Statement by China to the Committee on Technical Barriers to Trade 20 and 21 June 2018, *China – Chinese Environmental Protection Control Standards for Imported Solid Waste as Raw Materials*, G/TBT/W/547 (July 4, 2018).

¹⁷³ Taylor, *supra* note 128.

4. The restrictions are likely not the least trade restrictive option.

In addition to trying to meet the *Korea—Various Measures on Beef* factors, China would also have to show that these restrictions are the least trade restrictive measures possible to achieve its goal.¹⁷⁴ Under *US—Gambling*, the WTO Appellate Body has allowed the challenging country to suggest any less-restrictive measure as an alternative.¹⁷⁵ China would then have to prove that the suggested alternative was impractical to implement for the restrictions to be permitted to remain.¹⁷⁶ There are many potential alternative measures that could have been taken: restricting fewer products from being imported, setting the maximum contamination percentage at a more feasible level, and capping the amount of restricted materials of each category that can be imported (rather than outright banning them). China would have to prove that each of these potential measures was infeasible, and given the fact that recyclers in the country may still deal with domestic recyclables not subject to the same contamination level restrictions, it is not apparent that these alternative measures would meet this burden. Essentially, if the domestic recyclers can deal with contaminated domestic recyclables, it is not apparent that using a strict but not overly strict contamination level on imports was somehow infeasible—especially if the contamination level was set lower than the level for domestic recyclables.

5. The *chapeau* of Article XX poses a further barrier to XX(b) exception.

Finally, even if China is able to convince the WTO Panel that these restrictions do fall under Article XX(b), the restrictions still likely violate the *chapeau* of Article XX. The *chapeau* requires that any restrictions falling under the Article XX exceptions must not be “disguised restriction[s]” on international trade.¹⁷⁷ While China has indicated that its restrictions are intended to protect the environment and ensure that all countries deal with their own waste locally, the restrictions have had large positive financial impacts on Chinese domestic recyclables dealers¹⁷⁸ while the impacts on foreign recyclables dealers have been

¹⁷⁴ Trachtman, *supra* note 122, at 292 (citing Appellate Body Report, *United States—Measures Affecting the Cross-Border Supply of Gambling and Betting Services*, ¶¶ 306–11, WTO Doc. WT/DS285/AB/R (adopted Apr. 7, 2005)).

¹⁷⁵ Appellate Body Report, *United States—Measures Affecting the Cross-Border Supply of Gambling and Betting Services*, ¶ 311, WTO Doc. WT/DS285/AB/R (adopted Apr. 7, 2005).

¹⁷⁶ *Id.* at ¶¶ 306–11.

¹⁷⁷ GATT, *supra* note 15, at art. XX.

¹⁷⁸ One example is plastic pricing: current market price for PET in China rose from between 5,500 to 6,000 yuan per ton in 2017 to between 6,500 to 6,800 yuan per ton. Sarah Talaat, *How China’s “Foreign Waste” Ban Might Spur its Domestic Recycling Program*, SUP CHINA (July 2, 2018), <http://perma.cc/6C8S-QF9U>. China’s restrictions have been widely reported as an attempt to build

the opposite.¹⁷⁹ For example, the nearly \$400 per ton price difference between Chinese domestic cardboard and international cardboard has significantly benefited Chinese domestic recyclables dealers.¹⁸⁰ Admittedly, the artificially restricted supply has caused some difficulty for Chinese manufacturers who depend upon recyclables as an input into their production.¹⁸¹ However, these manufacturers are adapting by starting to build processing plants abroad. For example, Nine Dragons, a Chinese paper company, purchased a mill in the U.S. to maintain the input flow of recyclables necessary to continue production.¹⁸² This response means that manufacturers are able to take advantage of the low recyclable material prices abroad while recyclables dealers in China are still able to sell their material for high prices domestically. As a result, while the Chinese government has put an environmental gloss on these restrictions, the restrictions also seem to disproportionately benefit Chinese companies and restrict international trade. If that is the case, the restrictions violate the *chapeau* of Article XX. Thus, it is unlikely that China would be able to argue that these restrictions

up domestic recycling infrastructure. See Leone Young, *China: One Year On*, WASTE360 (July 10, 2018), <http://perma.cc/65B7-BRU7> (discussing “China’s recent focus on cleaning up its environment and boosting its domestic recycling infrastructure”). The “staggering” shortfall in supply for paper products, for example, means that recyclables suppliers can charge higher prices for their goods. See Colin Staub, *China Faces “Staggering” Shortfall in Recovered Fiber Supply*, RESOURCE RECYCLING (May 30, 2018), <http://perma.cc/EP4Z-JFVF>. One Chinese recycling company reported that it had a capacity for 50,000 tons of recyclable plastic bottles but was currently only collecting 30,000; however, there were seemingly widespread expectations that once a shift in consumer behavior occurred the supply would drastically increase. Saša Petricic, *China is No Longer the World’s Dumping Ground, but Cleaning up its Own Backyard is Proving to be a Challenge*, CBC NEWS (Mar. 28, 2018), <http://perma.cc/TMG2-UP2K>. The government has pushed to create local recycling collection centers to increase the domestic supply of recyclables, which Chinese corporations have been making use of. David Stanway, *China Starts New Recycling Drive as Foreign Trash Ban Widens*, REUTERS (Jan. 14, 2019), <http://perma.cc/VK4M-JQMV>.

¹⁷⁹ Waste Management, a major recyclables supplier in the U.S., reported in January 2019 that it expects its earnings from recycling to decrease by \$100 million compared to the previous year. Andrea Leinfelder, *Texas Recyclers Face Challenges of Weak Demand, Low Prices*, EL PASO TIMES (Jan. 14, 2019), <http://perma.cc/PBK5-585V>. In the U.S., aluminum (one of many affected resources) surpluses as a result of the restrictions (and other tariffs) have created “a complete buyers’ market.” Bob Tita, *Aluminum Scrap Abounds Thanks to Tariffs*, WALL ST. J. (Jan. 16, 2019), <http://perma.cc/9NGU-FETZ>. Waste 360 reports that mixed paper has been “virtually worthless and increasingly has to be landfilled.” Young, *supra* note 178.

¹⁸⁰ Staub, *supra* note 82.

¹⁸¹ Colin Staub, *Chinese Mills Short on Feedstock as SE Asia Overwhelmed*, RESOURCE RECYCLING (July 24, 2018), <http://perma.cc/3F32-V7GK>.

¹⁸² Colin Staub, *U.S. Recycled Pulp Mill Purchased by Paper Giant*, RESOURCE RECYCLING (Sept. 5, 2018), <http://perma.cc/3K4S-U27U>; see also Colin Staub, *Pipe Maker to Open US Processing Plant*, RESOURCE RECYCLING (Sept. 5, 2018), <http://perma.cc/S78N-7UGY>; Colin Staub, *Chinese Company to Open S.C. Recycling Facility*, RESOURCE RECYCLING (Sept. 11, 2018), <http://perma.cc/ANU9-852V>.

do not violate the GATT even if it is able to claim that they fall under the Article XX(b) exception.

C. Potential Ramifications of a Successful WTO Suit

If the U.S. were to successfully bring a claim against China and thus require China to bring its regulations into compliance with the national treatment requirement, there would be readily apparent benefits, like increased profits and less pollution. U.S. recycling shipments could potentially regain their value relatively quickly—which could increase the profits for many U.S. recycling companies harmed by the restrictions. Additionally, recyclables that many recycling sorters have either disposed of in landfills or left sitting in warehouses would be put to a positive use. Importantly, the suit is not certain to be successful so the expected value of these benefits is lower than it would be if the suit were sure to be successful. Furthermore, it is possible that China may not fully comply with a decision requiring it to eliminate its restrictions, making any benefits of a successful suit uncertain (further lowering the expected value of the suit).¹⁸³ Additionally, there are expected negative values associated with the ethical issues of forcing this type of change, as well as the certain diplomatic fallout and other associated costs. Overall, the expected costs of filing suit seem likely to outweigh the expected benefits.

1. A successful suit could result in profit recovery, economic growth, energy savings, and natural resource preservation.

For the U.S., the environmental and economic benefits of China eliminating its restrictions go hand in hand. Numerous U.S. recyclables processing operations have had to either store their sorted recyclable materials on site or consider landfilling the materials.¹⁸⁴ Storing the materials means that the materials are not being reincorporated into new materials, and landfilling the materials not only means the sorted recyclables are not being incorporated into new materials, but also that they are taking up landfill space that might be better used for material that cannot be reused.¹⁸⁵ Ultimately, this means that raw materials are used where recycled materials could be used instead. It also means that more landfills start to hit their capacity sooner (requiring more landfills to be created). In some instances,

¹⁸³ China has previously failed to comply with the terms of a dispute resolution. *See, for example*, Report of the Panel, *China – Anti-dumping and Countervailing Duty Measures on Broiler Products from the United States: Recourse to Article 21.5 of the DSU by the United States*, *supra* note 129, at 125–26.

¹⁸⁴ Brooks, *supra* note 13.

¹⁸⁵ Livia Albeck-Ripka, *Your Recycling Gets Recycled, Right? Maybe, or Maybe Not*, N.Y. TIMES (May 29, 2018), <http://perma.cc/4WPS-MK5Z>.

this also means resources are used unnecessarily to sort out recyclable materials that get put into a landfill as a last resort.¹⁸⁶

Winning a WTO suit and compelling China to remove or change its restrictions could mean that these recyclable materials could be sent to China and reused. This would mean that the recyclables sorters would once again have a market for their materials—likely leading to recovered profits.¹⁸⁷ The U.S. Environmental Protection Agency’s Recycling Economic Information Report found that in 2007, 1.57 jobs were created for every ton of material recycled.¹⁸⁸ The report also found that total recycling and reuse activities created 757,000 jobs, \$36.6 billion in wages, and \$6.7 billion in tax revenue.¹⁸⁹

Eliminating China’s restrictions would also mean that the materials themselves would not be landfilled and could replace some of the raw materials being used in manufacturing—resulting in overall savings of natural resources and energy.¹⁹⁰ Friends of the Earth, an international network of environmental organizations, reports that recycled steel saves roughly seventy percent of production energy, recycled aluminum saves seventy percent, and recycled paper saves forty percent.¹⁹¹ However, it is hard to speculate about what form the changed restrictions might take, so it is not guaranteed that all of these benefits would play out completely. Additionally, this would simply allow the recycling industry to continue to rely upon exporting waste when there could be long-term benefits from building up recycling infrastructure within the U.S.

2. Diplomatic fallout and potential economic retaliation will likely follow from a successful WTO suit.

As mentioned above, the U.S. and China are currently engaged in a trade war,¹⁹² which, if combined with a contentious WTO suit, is likely to worsen the relationship between the two countries. The U.S. Trade Representative has written that China’s protectionist policies were worse in 2017 than any of the preceding five years.¹⁹³ By attempting to “punish” China via a WTO suit, it is less likely that the U.S. would be able to foster diplomatic cooperation, and more likely that China would further entrench itself against the U.S.

¹⁸⁶ *Advancing Sustainable Materials Management: 2015 Fact Sheet*, U.S. EPA (July 2018) <http://perma.cc/XU8E-Z7PH>.

¹⁸⁷ *Recycling Economic Information Report*, U.S. EPA (2016), <http://perma.cc/RUJ3-27CD>.

¹⁸⁸ *Id.*

¹⁸⁹ *Id.*

¹⁹⁰ *9 Benefits of Recycling*, FRIENDS OF THE EARTH, (Mar. 29, 2018), <http://perma.cc/KZ8E-9YJC>.

¹⁹¹ *Id.*

¹⁹² Brown, *supra* note 96.

¹⁹³ UNITED STATES TRADE REPRESENTATIVE, *supra* note 72, at 2.

When other countries have taken actions of which China disapproves, it has been able to channel that anger to cause significant harm to the offending nation. For example, in 2017, a Korean supermarket chain (Lotte) sold land to the South Korean government so that the government could deploy Terminal High Altitude Area Defense (THAAD) missiles on the site.¹⁹⁴ The Chinese government voiced its disapproval of the South Korean government's decision to deploy the missiles.¹⁹⁵ Subsequently, Chinese consumers boycotted Lotte, causing it to sell all of its stores in China.¹⁹⁶ The supermarket chain was subject to many store closures over fire safety inspections (potentially due to heightened scrutiny by the Chinese government).¹⁹⁷ Reports indicated that the Chinese state media encouraged the consumer boycott.¹⁹⁸ Furthermore, there was a spike in cyberattacks originating in China against South Korean targets following the deployment of the missiles.¹⁹⁹ China's response to South Korea's action was not a one-time event. For example, it has also recently engaged in state media-sponsored targeting of Japanese corporations in order to push consumers to buy domestic products.²⁰⁰ Its "boycott diplomacy" has been called devastating, with foreign companies largely helpless if China becomes upset with the companies' home nation.²⁰¹

In addition to fear of potential boycotts, China could withhold essential regulatory decisions or use its ownership of U.S. debt to potentially harm the U.S. economy. As an example of regulatory action, China was able to completely block a merger between a U.S. company and a Dutch company by not granting regulatory approval for the \$44 million deal.²⁰² China's ability to withhold

¹⁹⁴ *South Korea's Lotte Group Offers Golf Course for THAAD Missile Deployment*, SOUTH CHINA MORNING POST (Feb. 27, 2017), <http://perma.cc/JEJ7-5AVR>.

¹⁹⁵ Ben Blanchard, *Chinese News Agency Warns South Korea's Lotte over THAAD*, REUTERS (Feb. 20, 2017), <http://perma.cc/N5B8-MKNL>; *South Korea's Lotte to Sell China Shops in Face of Boycott*, THE STRAITS TIMES (Sept. 15, 2017), <http://perma.cc/XSA9-PADP>.

¹⁹⁶ Huileng Ten, *Chinese Media Warn about 'Lessons' for South Korea When it Ignores Beijing's 'Concerns'*, CNBC (Sept. 19, 2017), <http://perma.cc/8DBB-TWGF>.

¹⁹⁷ Hyunjoo Jin, *Lotte Shopping Picks Goldman to Manage Sales of Supermarkets in China*, REUTERS (Sept. 14, 2017), <http://perma.cc/28GD-X32E>.

¹⁹⁸ *How China Could Hurt the U.S. if it Runs out of Imports to Tax*, CBS NEWS (July 10, 2018), <http://perma.cc/W4KR-4AX9>.

¹⁹⁹ Jonathan Cheng and Josh Chin, *China Hacked South Korea Over Missile Defense, U.S. Firm Says*, WALL ST. J. (Apr. 21, 2017), <http://perma.cc/FW8G-45BJ>.

²⁰⁰ Emily Feng, *Three China store chains pull Japanese goods in radiation scare*, FIN. TIMES (Mar. 21, 2017), <http://www.ft.com/content/c7a2f668-2f4b-11e7-9555-23ef563ecf9a> (citing Chinese state media television's false reports of radiation affecting Japanese goods).

²⁰¹ Ben Bland et al., *China wields power with boycott diplomacy*, FIN. TIMES (May 3, 2017), <http://www.ft.com/content/c7a2f668-2f4b-11e7-9555-23ef563ecf9a>.

²⁰² Sherisse Pham, *China Kills Qualcomm's \$44 Billion Deal for NXP*, CNN BUSINESS (July 26, 2018), <http://perma.cc/HS6H-YLM8>.

regulatory decisions like this one could impose immense costs for U.S. businesses and the U.S. economy generally. Furthermore, China could sell some of its holdings of U.S. debt, causing the value of the dollar to decrease—which would make borrowing more expensive for U.S. consumers and companies, potentially slowing the U.S. economy.²⁰³ A decrease in the value of the dollar would also make imports into the U.S. more expensive for U.S. consumers, and exports from the U.S. cheaper for foreign consumers.²⁰⁴

All of the previously discussed potential actions would have severe impacts for the U.S. economy and are potential avenues through which China could respond if a successful U.S. suit pushes diplomatic tensions too far. It is hard to predict what actions China would realistically take, but assigning even a small probability to large-magnitude costs increases the expected cost of diplomatic ramifications.

3. China may not fully comply with a WTO panel decision even if the suit is successful.

China has previously not complied with the mandatory remedies for implementing a WTO decision from a dispute it lost. In 2011, the U.S. filed a complaint with the WTO regarding Chinese regulations on the import of “broiler products.”²⁰⁵ The U.S. argued that China’s imposition of the regulations was not sufficiently transparent or factually justified as the WTO required such restrictions to be.²⁰⁶ After both countries had the opportunity to make their cases, the WTO found that the Chinese regulations were in violation of the rules binding WTO members and China agreed to bring its regulations into compliance.²⁰⁷ However, China’s attempts at revising the regulations were apparently unsatisfactory or insufficient. The U.S. filed a complaint on June 2, 2016, arguing that China had failed to follow the agreement and had not brought its regulations into

²⁰³ Bryan Boryzowski, *China's \$1.2 Trillion Weapon that Could be Used in a Trade War with the U.S.*, CNBC (Apr. 5, 2018), <http://perma.cc/SFX3-WB8G>.

²⁰⁴ Bob McTeer, *Is a Strong Dollar a Good Thing or a Bad Thing?*, FORBES (Jan. 24, 2015), <http://perma.cc/SZ4H-7B5E>.

²⁰⁵ Request for Consultations by the United States, *China – Anti-dumping and Countervailing Duty Measures on Broiler Products from the United States*, WT/DS427/1 G/L/960 (Sept. 23, 2011), *supra* note 129.

²⁰⁶ *Id.*

²⁰⁷ Report of the Panel, *China – Anti-dumping and Countervailing Duty Measures on Broiler Products from the United States*, 166, WT/DS427/R (Aug. 2, 2013) (finding that China’s regulations violated WTO requirements); Action by the Dispute Settlement Body, *China – Anti-dumping and Countervailing Duty Measures on Broiler Products from the United States*, WT/DS427/5 (Sept. 30, 2013) (adopting the Panel Report); *China – Anti-dumping and Countervailing Duty Measures on Broiler Products from the United States: Agreement Under Article 23.1(B) of the DSU*, WT/DS427/7 (Jan. 6, 2014), *supra* note 129 (stating that the US and China have agreed to a schedule within which China will bring its regulations into compliance).

compliance.²⁰⁸ It asked the WTO to convene a panel to determine whether China had sufficiently revised its regulations.²⁰⁹ On March 1, 2018, the panel found that China had not complied with what it had agreed to do and the Dispute Settlement Body adopted the panel report, compelling China to once again revise its restrictions.²¹⁰

The dispute over broiler products shows that China will not necessarily comply fully with an adverse WTO Panel decision, and that it might further entrench its policies without engaging diplomatically. In the broiler products dispute, the U.S. had to return to the WTO in an attempt to force China to comply—meaning the U.S. was unable to get China to comply with the agreement via diplomacy. In this case, China would be in a particularly good position to not follow strictly the result of a WTO decision favorable to the U.S. Given the environmental lens through which the restrictions have been implemented, China could paint the U.S. as attempting to forcibly prevent China from pursuing better environmental protections for its ecosystems and its people.

4. The U.S.’s decision to file a WTO suit could be seen as environmental imperialism.

By entering into a WTO dispute with China over China’s recycling restrictions, the U.S. would potentially engage in environmental imperialism. Environmental scholars have identified two types of environmental imperialism that regularly play out in the world. The first type is the imperialism of wealthy, developed countries forcing their restrictive environmental protections on other countries that are attempting to develop industry through potentially environmentally harmful policy.²¹¹ A stark example of this phenomenon is the lobbying campaign by environmental groups attempting to stop the World Bank from approving a loan for a coal-fired power station in South Africa.²¹² The second type is the imperialism of wealthy, developed countries sending their waste

²⁰⁸ Request for the Establishment of a Panel, *China – Anti-dumping and Countervailing Duty Measures on Broiler Products from the United States: Report of the Panel: Recourse to Article 21.5 of the DSU by the United States*, WT/DS427/11 (June 2, 2016) (requesting a panel be formed to evaluate China’s compliance with the countries’ agreement).

²⁰⁹ *Id.*

²¹⁰ Report of the Panel, *China – Anti-dumping and Countervailing Duty Measures on Broiler Products from the United States: Recourse to Article 21.5 of the DSU by the United States*, WT/DS427/RW (Jan. 18, 2018), at 125–26; Action by the Dispute Settlement Body, *China – Anti-dumping and Countervailing Duty Measures on Broiler Products from the United States: Recourse to Article 21.5 of the DSU by the United States*, WT/DS427/14 (Mar. 1, 2018).

²¹¹ Gonzalez, *supra* note 21, at 979–80.

²¹² Andrew Chambers, *The Fight Against Eco-Imperialism*, THE GUARDIAN (Apr. 11, 2010), <http://perma.cc/8YV9-6QCU>. Ultimately the loan was approved over the loud objections of the environmental groups.

and dirty industries to developing countries.²¹³ For example, Guinea-Bissau was offered \$600 million to import fifteen million tons of industrial waste over five years.²¹⁴ While the offer was economically extraordinary, its potential health effects could have been disastrous.²¹⁵

China arguably encounters situations akin to both kinds of imperialism regularly—though its position as a developed or developing country is the subject of controversy.²¹⁶ In terms of waste exports, all of the evidence discussed up to this point indicates that China has long accepted the recyclables that developed countries export in disproportionate quantities. China has also accepted a disproportionate share of other waste as well. In 2013, roughly seventy percent of electronic waste ended up in China and was largely processed in a manner harmful to human health and the local environment.²¹⁷ China has also run into issues where environmental protection concerns from developed nations seem to prevent it from economically developing.

Commentators have noted that China has repeatedly run into “green barriers” in trade. “Green barriers” are environmental restrictions in other countries that require a level of environmentally-friendly processing too high for certain producers to meet. Here, Chinese goods made to lower environmental standards cannot be imported into some countries because Chinese firms cannot meet their high environmental standards. Yuhong Zhao, Associate Professor of Law at the Chinese University of Hong Kong, writes that

[b]oth the business sector and many government officials fear that the legitimate goals of protecting the health and safety of human beings, animals, and plants could be used as a pretext for the introduction of protectionist trade policies designed to slow down trade growth and cause economic stagnation for China.”²¹⁸

Zhao, in another article, advocates for the implementation of more stringent environmental protections within China to attempt to overcome these

²¹³ Gonzalez, *supra* note 21, at 990–92.

²¹⁴ See Jennifer R. Kitt, *Waste Exports to the Developing World: A Global Response*, 7 GEO. INT’L ENVTL. L. REV. 485, 490 (1995).

²¹⁵ *Id.* Guinea Bissau initially accepted the deal but later rescinded its acceptance.

²¹⁶ Simon Lester and Huan Zhu, *The WTO Still Considers China a ‘Developing Nation.’ Here’s the Problem With That*, CATO INST. FOR CNBC (Apr. 25, 2018), <http://perma.cc/WQ7D-7NDU>.

²¹⁷ Ivan Watson, *China: The Electronic Wastebasket of the World*, CNN (May 30, 2013), <http://perma.cc/S7TM-4DJX>.

²¹⁸ Zhao, *supra* note 106, at 55 (citing Meng Jianguo, *The Impact of New Trade Protectionism on China’s Economy*, THE FRONTIER 43–46 (no. 2, 2003); Zhang Zhimin, *An Analysis of Trade Protectionism after the Establishment of WTO*, WORLD TRADE ORGANIZATION FOCUS 15–17 (no. 3, 2005).

“green barriers.”²¹⁹ The restrictions that China has implemented on recycling could potentially be seen as an attempt to do just that.²²⁰

A successful WTO suit brought by the U.S. could be viewed as imperialistic through the implication that the U.S. forcibly required China to accept the U.S.’s waste irrespective of the cost to China’s environment. China, faced with “green barriers” to the export of its goods, has adopted restrictions on recyclables imports in order to clean up its environment and meet the higher environmental standards of other countries to which it exports materials. This attempt at cleaning up its environment has not been met with encouragement. Instead, there were protests and letters from the E.U. and the U.S. to the WTO complaining about rushed implementation of restrictions, potential trade unfairness, and waste diversions that may harm the environment.²²¹ Rather than support China’s attempt to clean up its environment, the U.S. would frustrate China’s move towards environmental improvement and push the environmental costs of processing U.S. waste onto China. It would be diplomatically unwise and potentially unethical for the U.S. to use the WTO to force China to accept the U.S.’s contaminated recyclables and waste.

D. Potential Ramifications of an Unsuccessful Suit

For the U.S., an unsuccessful suit would be a particularly bad result. First, as with those from a successful suit, the diplomatic ramifications of an unsuccessful suit could still be viewed as imperialistic and lead to a worse relationship between the U.S. and China. Second, the negative environmental and economic effects of China’s recycling restrictions (as laid out previously) would stay in place. Third, the U.S. would also have sunk time and resources into attempting to win the suit with no payoff. In fact, there is a possibility that the WTO Panel or Appellate

²¹⁹ Yuhong Zhao, *Overcoming Green Barriers: China’s First Five Years into the WTO*, 41 J. WORLD TRADE 535, 551 (2007).

A most positive and effective way for China to overcome the ‘green barrier’ is to gradually adopt more stringent ‘international standards’ into its domestic law regime where economically and technologically feasible so that enterprises are better informed of the mandatory standards they need to comply with in the production, processing, packaging, storage and final disposal after consumption.

²²⁰ For a brief discussion of Chinese regulation proposals implementing waste contamination restrictions and enhanced environmental accountability in the form of environmental taxes and increased producer responsibility, see Weiwei Luo and Shengzhi Wang, *Top Environmental Authority in China Proposes Amendment to the Solid Waste Law*, BEVERIDGE & DIAMOND PC ON LEXOLOGY (July 31, 2018), <http://perma.cc/GK5M-592S>.

²²¹ Statement by the European Union to the Committee on Technical Barriers to Trade 21 and 22 March 2018, *China – Chinese Environmental Protection Control Standards for Imported Solid Waste as Raw Materials*, G/TBT/W/472 (Apr. 16, 2018), *supra* at note 130, and Statement by the United States to the Committee on Technical Barriers to Trade 21 and 22 March 2018, *China – Chinese Environmental Protection Control Standards for Imported Solid Waste as Raw Materials*, G/TBT/W/468 (Mar. 21, 2018), *supra* note 130.

Body may decide the case and create a precedent that might be particularly harmful to U.S. interests in the future when faced with other import regulations that restrict trade.

E. Potential Benefits of Not Filing Suit

The most obvious benefit of not filing suit is avoiding further diplomatic tension with China. Although the U.S. is still involved in multiple trade disputes with China at the WTO, one fewer suit is one fewer straw that could potentially break the diplomatic camel's back. This case would also be particularly likely to increase tension because of the conflicting forces pulling in different directions. China's processes are labeled too dirty for countries to allow certain imported materials while it is simultaneously being lobbied to allow still more potentially polluting materials to come through its borders. China has ostensibly adopted the restrictions to improve its environmental protections and chosen which of the conflicting demands it would meet (in other words, chosen to overcome the green barriers it faces). If the U.S. were to file suit and nullify that choice, it would likely result in China taking out its understandable frustration through decreased diplomacy.

Another potentially more impactful benefit over the long-term would be the increased potential for the U.S. to more fully develop its recycling infrastructure. The current oversupply of recyclable materials means that their prices are quite low, so the start-up costs for new recycling facilities (facilities that take recyclable materials and process them so they can be used as raw material inputs for manufacturers) might be lower than they otherwise would be.²²² Chinese corporations have already noticed this and have taken advantage of the trend by opening plants in the U.S. U.S. corporations could join this trend.²²³

Opening these new plants would be environmentally and economically beneficial. The environmental benefits of recycling generally have already been laid out. However, there are also added benefits to local recycling operations—the decreased transit distances would mean less reliance upon transportation infrastructure built largely around fossil fuel consumption. Less transportation and use of fossil fuels means cleaner air and a decreased contribution to global warming. Economically, the plants would create jobs for the communities in which they are built and could lower the input costs for domestic manufacturers seeking readily available raw materials. Furthermore, the plants could increase

²²² Price estimates for facility start-up costs are seemingly unavailable given the variability of different locational, environmental, and operational requirements that can lead to drastic price differences. However, the example of non-Chinese Old Corrugated Cardboard trading at very low prices because of an oversupply indicates that the input material costs would potentially be lower than they otherwise would be. *See* Staub, *supra* note 82.

²²³ Staub, *supra* note 182.

demand for the sorted materials coming from recycling sorting facilities currently suffering from the Chinese restrictions and resultant lack of demand.

Finally, the moral aspect of not filing suit is also significant. Rather than forcing China to accept waste it has actively tried to avoid, the U.S. would attempt to solve the problem of its own waste internally. The U.S. has sent its contaminated waste and its externalities across the sea without facing the true costs of doing so. The Chinese government has previously rebuked the U.S. for such actions, but the pattern of exporting waste has continued.²²⁴ Importantly, the problem is not that the U.S. is sending recyclable materials to China, but rather that those shipments are frequently contaminated and China is forced to deal with those contaminants. By not filing suit, the U.S. would avoid forcing China to accept environmental harms.

Of course, there is the response that if the U.S. does not file suit and cannot export its recyclables to China then, rather than processing it domestically, the U.S. will ensure that some other nation will be stuck with the waste. Indeed, that was the case for some time after the restrictions were put in place—Thailand and Taiwan (among other nations) were inundated with the redirected flow of recyclables. However, those nations have also begun to close their doors, and other nations would likely follow suit. Although it is possible the U.S. would simply keep shifting its recyclables exports to other countries, at some point it would run out of options if the current trend continues. As a result, it is not certain that the U.S. would truly act ethically after not filing suit against China for these recyclables restrictions, but it is at least possible and it would potentially be inevitable.

F. Not Filing Suit is the Better Choice for the U.S.

Although the potential economic and environmental benefits from filing and winning a WTO suit are significant, the morally questionable overtones of the suit, the possibility that China fails to comply with the WTO decision, the negative diplomatic outcomes, and the negative trade outcomes likely offset any benefits from a successful suit. Additionally, the low probability but very negative potential results of an unsuccessful suit (wasted resources, diplomatic fallout, unchanged economic and environmental situation, and being morally compromised) make filing suit an even more unattractive option. In contrast, the morally positive outcome of not filing suit—combined with the avoided diplomatic costs, the potential growth of national recycling infrastructure, and the saved costs of resources spent in filing suit—seem to significantly outweigh the economic and environmental costs of the U.S. not being able to send much of its recyclables to

²²⁴ *Environment, Development, and Human Rights in China*, in HUMAN RIGHTS AND THE ENVIRONMENT: CONFLICT AND NORMS IN A GLOBALIZING WORLD 210–11 (Lyuba Zarsky ed., 2002).

China. Choosing not to file suit—in spite of the negative consequences—is the better choice.

V. CONCLUSION

The issue of China's increasing restrictions on recyclables imports is one that has not gathered as much press outside of industry circles as the general trade war with China, but it may have large environmental and economic consequences for decades to come. China's significant role in the global recycling trade has meant that its restrictions have seriously disrupted the industry, and there has not yet been a clear path forward as other countries have also closed their ports to recyclables imports. As a WTO member, China is required to comply with the GATT (among other obligations), and it is likely that these recyclables import restrictions are in violation of the GATT. Under the existing WTO Appellate Body case law, China is unlikely to be able to argue that its restrictions meet the requirements of exception under Article XX(b), and thus it is possible that the U.S. could force China to revise its restrictions by filing and winning a WTO suit.

However, given the serious diplomatic and moral ramifications of a successful WTO suit, not filing suit would be more beneficial than filing suit. Unfortunately, this means the U.S. must determine another way to deal with its growing overstock of recyclable materials. There is no easy path forward outside of the WTO for the U.S. to take as a nation, but individual waste processing companies have the ability to begin building domestic infrastructure—and the U.S. government or local governments could potentially provide the funds to do so.