DEPARTMENT OF HEALTH AND HUMAN SERVICES
Food and Drug Administration

Administrative Destruction of Certain Drugs Refused Admission to the United States; Proposed Rule

Docket No. FDA-2014-N-0504

Preliminary Regulatory Impact Analysis
Initial Regulatory Flexibility Analysis
Unfunded Mandates Reform Act Analysis

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I. Introduction and Summary

A. Introduction

FDA has examined the impacts of the proposed rule under Executive Order 12866, Executive Order 13563, the Regulatory Flexibility Act (5 U.S.C. 601-612) and the Unfunded Mandates Reform Act of 1995 (Public Law 104-4). Executive Orders 12866 and 13563 direct Agencies to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity). The Agency believes that this proposed rule would not be an economically significant regulatory action as defined by Executive Order 12866.

If a rule has a significant economic impact on a substantial number of small businesses, the Regulatory Flexibility Act requires Agencies to analyze regulatory alternatives that would minimize any significant impact of a rule on small entities. FDA has determined that this proposed rule would not have a significant economic impact on a substantial number of small entities.

Section 202(a) of the Unfunded Mandates Reform Act of 1995 requires that Agencies prepare a written statement, which includes an assessment of anticipated costs and benefits, before proposing "any rule that includes any Federal mandate that may result in the expenditure by state, local, and tribal governments, in the aggregate, or by the private sector, of $100,000,000 or more (adjusted annually for inflation) in any one year." The current threshold after adjustment for inflation is $141 million, using the most current (2012) Implicit Price Deflator for the Gross Domestic Product. FDA does not expect this proposed rule to result in any 1-year expenditure that would meet or exceed this amount.

B. Summary of Costs and Benefits

The proposed rule would implement FDA's authority to destroy a drug offered for import that has a value of $2,500 or less (or such higher amount as the Secretary of the Treasury may set by regulation) and that has been refused admission, by providing notice to the owner or consignee and an opportunity to appear and introduce testimony prior to the destruction. Administrative destruction of a refused drug valued at or below $2,500 is a new enforcement tool and we are not able to directly estimate how often it might be used. Our primary estimate assumes all refused drugs valued at $2,500 or less would be destroyed.

The primary public health benefit from adoption of the proposed rule would be the value of the illnesses or deaths avoided because the Agency destroyed a refused drug valued at $2,500 or less (or such higher amount as the Secretary of the Treasury may set by regulation) that posed a public health risk. Additionally, the proposed rule may benefit firms through increases in sales, brand value, and investment in research and development if the destroyed drug is a counterfeit or an otherwise falsified version of an approved drug. The threat of destruction may also have a deterrent effect resulting in a reduction in the amount of adulterated, misbranded, or unapproved drugs (violative drugs) shipped into the United States in the future. These benefits accrue

Table 1 – Summary of Net Social Benefits

		Low Estimate	High Estimate
	Annual Net Social Benefits	$228,000	$618,000
20-Year Present Value of Discounted Social Costs	3% Discount Rate	**$3,386,000**	**$9,169,000**
	7% Discount Rate	**$2,411,000**	**$6,529,000**

whenever the Agency's other enforcement tools would not have prevented a violative drug from entering the United States market. The current procedure whereby a drug refused admission might be exported does not ensure that the drug would not be imported into the United States in the future.

The estimated primary costs of the proposed rule, if finalized, include the additional costs incurred by FDA to destroy a refused drug as opposed to the costs related to exportation of the drug[1]. Our primary estimate assumes all refused drugs valued at $2,500 or less (or such higher amount as the Secretary of the Treasury may set by regulation) would be destroyed, FDA would contract the act of destruction out to another government agency or private firm, and the notice and hearing process for destruction would be combined with the current FDA notice and hearing process for refused drugs. If these do not hold, FDA may incur further costs, such as purchasing equipment to destroy the refused drugs, training employees to destroy the refused drugs, additional notification to the owner or consignee of the refused drug, storing the refused drug until it is destroyed, and preparing for a hearing on destruction if requested by an owner or consignee.

The quantifiable net annual benefits to society of the proposed rule, if finalized, are summarized in Table 1. We estimate the impact using an estimated 12,100 administrative destructions performed each year. The Agency estimates the quantifiable net annual social benefit of the proposed rule to range between $228,000 and $618,000. The present discounted value of the quantifiable net social benefit over 20 years would be in the range of $3,386,000 to $9,169,000 at a 3 percent discount rate and in the range of $2,411,000 to $6,529,000 at a 7 percent discount rate.

II. Preliminary Regulatory Impact Analysis

A. Background

The drug supply chain is global and highly complex. Starting with its raw materials, a drug may be manufactured, packaged, labeled, and distributed in multiple locations across the globe. The Agency reports that 40 percent of all drugs consumed in the United States are imported (Ref. 1). Drugs manufactured in the United States often contain active pharmaceutical ingredients from overseas. The Agency reports that 80 percent of the active pharmaceutical ingredients (APIs) in drugs consumed in the United States are imported (Ref. 1).

[1] We estimated the quantifiable costs of this proposed rule based on its annual impact to society as a whole. Therefore, the authority provided to FDA by section 801(a) and (c) of the Federal Food, Drug and Cosmetic Act (FD&C Act) to recoup the costs of storage and destruction from an owner or consignee does not factor into the estimated primary costs of the proposed rule.

1. Current Drug Importation Process

Foreign drugs may enter the United States several ways: shipping a drug through a commercial port of entry, an express courier service, or via international mail. These drugs may include finished drugs, as well as components of a drug such as active pharmaceutical ingredients (APIs), and are shipped to the United States for eventual commercial distribution. Parcels containing drugs sent via an express courier service enter the United States through one of the express courier's international hubs. Mail parcels containing drugs sent through the United States Postal Service (USPS) enter the United States through an International Mail Facility (IMF).

Drugs offered for import are subject to refusal of admission if, among other reasons, they appear to be adulterated or misbranded, or appear to be an unapproved drug. The owner or consignee of the detained drug is issued a notice of detention and has an opportunity to respond to the Agency's intended refusal of the drug. If FDA determines the drug is or appears to be adulterated, misbranded, or an unapproved drug, the drug is refused admission and the owner or consignee is issued a Notice of Refusal; otherwise, the drug is released. Drugs that have been refused admission must be exported or destroyed within ninety days of the refusal.

2. International Trade and Internet Pharmacies

As international trade in drugs continues to grow, it is possible the number of adulterated, misbranded, and unapproved drugs, including counterfeit drugs and drugs that are represented and sold as dietary supplements, offered for import to the United States would also increase. In addition to the general increase in international trade, the increase in drugs shipped to the United States may partly be due to an increase in the number of internet pharmacies, some of which are not licensed as a pharmacy in the United States. In July 2013, the Government Accountability Office (GAO) issued a report on rogue internet pharmacies. In its report, GAO defined a rogue internet pharmacy as a fraudulent enterprise that operates in violation of federal and/or state law, offers cheap drugs for sale without a prescription that meets federal and state requirements, or operates without a pharmacy license in the United States. According to the GAO report, LegitScript, an online pharmacy verification service that assesses the legitimacy of internet pharmacies, estimated that there were over 34,000 rogue internet pharmacies as of April 2013 (Ref. 2). Approximately 23 percent of American adult Internet users acknowledge purchasing prescription drugs online (Ref. 3). A recent review of internet pharmacies by the National Association of Boards of Pharmacy reveals that approximately 97 percent of the over 10,500 online pharmacies examined did not meet federal and state pharmacy laws or pharmacy practice standards (Ref. 4).

Rogue internet pharmacies are attractive to consumers because they offer for sale prescription-strength drugs at lower prices than licensed pharmacies in the United States, often without requiring a prescription. These sites may have the appearance of a legitimate operation due to professional web development, but the safety and effectiveness of the drugs offered for sale on the site may not have been verified. A 2010 report estimates that approximately 17 percent of American adults have purchased a prescription drug online without a prescription (Ref. 5). On the supply side, internet pharmacies are attractive to criminals because they are an

easy way to sell fraudulent and illegal drugs with a low risk of being caught but a potentially high reward. Some of the larger rogue internet pharmacies bring in between $1 million and $2.5 million in sales each month (Ref. 6).

3. Counterfeit Drugs

Counterfeit drugs are those that use a counterfeit mark on or in connection with the drug. These drugs can contain too much, too little, or none of the API, they can contain the wrong API, or they can be packaged with labeling that falsely suggests the drug was manufactured by an FDA-approved manufacturer (Ref. 7). By taking these drugs, consumers may also be prevented from getting the actual medications that they need. The World Health Organization reports that less than 1 percent of the drugs available in developed countries, such as the United States, are counterfeit but that approximately 50 percent of the pharmaceuticals on worldwide illegal websites are counterfeit (Ref. 8).

B. Need for Regulation

The primary objective of this proposed rule is to provide FDA with an additional enforcement tool to better protect the nation's drug supply by implementing an administrative process for the destruction of refused drugs valued at $2,500 or less (or such higher amount as the Secretary of the Treasury may set by regulation) without providing the owner or consignee the opportunity to export the refused drug. Drugs with a value of $2,500 or less (or such higher amount as the Secretary of the Treasury may set by regulation) may enter the United States through an IMF, an express courier hub, or an air, land, or sea port of entry.

Violative drugs might contain too much, too little, or none of the active ingredient, can contain the wrong active ingredient, or can contain a toxic ingredient. Consumers who take violative drugs may get sick or die. For certain classes of drugs (e.g. antibiotics), quality problems can also increase the likelihood of drug resistance. In addition, the sale of counterfeit drugs may result in loss of revenue, loss of market value, and lower investment in research and development.

Prior to the authority that the proposed rule would implement, when FDA refused admission to a drug offered for import under section 801(a) of the FD&C Act, the drug could be exported within ninety days of refusal. To destroy a drug, it would have to be seized and condemned under section 304 of the FD&C Act or under CBP's seizure and forfeiture authority, such as 19 U.S.C. §1595a(c).

These enforcement tools do not provide adequate assurance that unsafe or ineffective drugs valued at $2,500 or less would not enter the United States' or another country's drug supply, especially for drug parcels sent through the IMFs. The number of parcels containing these drugs to be examined at IMFs has surpassed the resources available to both CBP and FDA. The United States Postal Inspection Service estimated that the average number of international mail parcels that came into the U.S. through the IMFs from November 1, 2011, to October 31, 2012, totaled nearly 1.2 million every day. It is estimated that the number of such parcels which

contain drugs that enter the United States each year through the IMFs is between 20 million and 100 million.

Drugs that have been refused and exported may find their way back to a United States. As the volume of drugs shipped to the United States increases, the probability that a package containing a violative drug would be selected for review would likely decline due to FDA and CBP resource constraints, increasing the possibility of previously-refused drugs entering the United States' drug market.

C. Baseline Conditions

The proposed rule would provide notice to the owner or consignee and an opportunity for the owner or consignee to appear before the Agency to contest the destruction of a refused drug valued at $2,500 or less, prior to destruction. In order to estimate the net economic impact of this proposed rule on society, an approximation of the change in behavior of consumers, producers, and FDA is needed. The effects of the proposed rule are estimated relative to a baseline. The baseline represents the state of the world in the absence of the proposed regulatory action. The current state of regulatory authority over unapproved, adulterated, or misbranded drugs offered for import with a value of $2,500 or less is the baseline in this analysis.

Currently, FDA may refuse an imported shipment containing a drug valued at $2,500 or less (or such higher amount as the Secretary of the Treasury may set by regulation) if it appears to violate the FD&C Act. Drugs that are refused admission into the United States must be exported or destroyed within ninety days. We assume FDA may use the proposed administrative destruction enforcement tool for any refused drug valued at $2,500 or less.

To analyze the impact of the proposed rule, we must first estimate how many times the Agency might use administrative destruction. We can approximate the maximum number of times FDA might destroy a drug by the number of times FDA has refused the admission of a drug valued at $2,500 or less. Table 2 presents the average refusal numbers for drugs valued at $2,500 or less for air, land, and sea ports of entry, express couriers, and IMFs per year over the Fiscal Year 2011 to Fiscal Year 2013 time period. Over this time period, FDA refused an average of approximately 12,100 drug imports per year. Approximately 57 percent of the refusals over this time period occurred at the IMFs.

Over the 3 year time period, FDA refused approximately 3 percent of all imported drugs valued at $2,500 or less that it reviewed. FDA refuses approximately 1 percent of the drugs valued at $2,500 or less it examines at air, land, and sea ports, and approximately 2 percent of the drugs valued at $2,500 or less it examines at express couriers. Approximately 70 percent of the total drugs valued at $2,500 or less that FDA examines at IMFs were refused.

D. Effects of the Proposed Rule

Due to uncertainty about the method of destruction, how often the Agency would combine the notice and appeals process for destruction with refusal, and how often the Agency would destroy a refused drug valued at $2,500 or less, we must make certain assumptions in

Table 2 – Average Refusal Numbers, FY2011 – FY2013

	Commercial Port	Courier	IMF	Total
Average Number Refused	3,100	2,100	6,900	12,100
Percentage of Refusals	25.61%	17.47%	56.92%	100%
Percentage of FDA Reviews	1.06%	2.13%	69.73%	3.02%

order to estimate the potential effects of the proposed rule. The purpose of this exercise is to reflect all possible uses of the authority. What follows is a list of assumptions we make in order to estimate the potential benefits and potential costs of the proposed rule that are presented in sections E and F of this document.

Assumptions:

(a) All refused drugs that are subject to destruction under the new authority will be destroyed.
(b) The costs associated with destroying a refused drug will be borne by FDA.
(c) Current and projected costs after refusal:
    i. Refused drug parcels at IMFs are currently exported at the expense of USPS. After adoption of the proposed rule, all refused drug parcels valued at $2,500 or less will be destroyed at FDA's expense instead of being exported by USPS. This would represent a transfer of resources between the government agencies.
    ii. Refused drugs at express courier hubs are currently either exported or destroyed at the expense of the express courier because they take possession of the drug. After adoption of the proposed rule, if finalized, all refused drugs will be destroyed. This could result in costs being shifted from the express couriers to FDA.
    iii. Refused drugs at commercial ports are currently exported or destroyed at the expense of the importer because they take ownership of the drug. After adoption of the proposed rule, all refused drugs valued at $2,500 or less will be destroyed at FDA's expense instead of being exported or destroyed at the importer's expense. Since the value of a violative product is not appropriate to include in benefit-cost analysis, destruction of the violative drug would not result in a cost savings to importers but may add a cost to FDA.
(d) Destruction will be by incineration.
(e) The destruction of a refused drug valued at $2,500 or less will be contracted to another government agency or private firm.
(f) FDA will always combine the notice of destruction with the notice of refusal.
(g) FDA will always combine the opportunity to present testimony regarding destruction with the opportunity to present testimony regarding refusal.

In order to present a number of possibilities, we relax several of the assumptions and discuss the results in sections G and H.

E. Benefits of the Proposed Rule

Adopting the proposed rule would provide FDA with another enforcement tool to better protect the nation's drug supply chain. This new authority would allow FDA to destroy drugs valued at $2,500 or less (or such higher amount as the Secretary of the Treasury may set by

regulation) offered for import once they have been refused admission into the United States. Primary benefits to society include the value of additional illnesses or deaths avoided by administrative destruction compared with other enforcement and regulatory actions that are currently available. If the violative drugs are substitutes for legitimate drugs, then the firms selling the legitimate drugs will receive benefits through increased sales. There would also be benefits from deterrence if administrative destruction increases the likelihood that violative drugs would not be imported in the future.

While the proposed rule would allow FDA to ensure a refused drug offered for import that is valued at $2,500 or less (or such higher amount as the Secretary of the Treasury may set by regulation) is permanently removed from commerce in the United States through destruction, we are unable to estimate the total potential annual benefits because we cannot measure the effectiveness of current enforcement and regulatory actions. Also, it is difficult to get an accurate estimate of the prevalence of the illicit drug trade and the current impact on consumers, producers, and the economy due to the multiple dimensions that must be considered, including types of drugs, consumer substitution for drugs purchased on the internet, and the prevalence of counterfeit drugs (Ref. 9). Available estimates are highly sensitive to the assumptions used to calculate the impact.

Without knowing the likelihood or cost of an event, we cannot quantitatively measure the reduction in probability of an event occurring or the possible reduction in all costs of an event associated with each regulatory option. What follows is a qualitative discussion of the types of benefits that may be realized by consumers and producers with finalization of the proposed rule. We end this section with a discussion of the possible cost savings to express couriers as a result of implementation of the proposed rule.

1. Possible Benefits to United States Consumers

Consumers may benefit from the proposed rule through the reduction in their consumption of drugs not approved in the United States. Drugs not approved for sale in the United States may not be safe or effective. Counterfeit drugs may contain no active ingredient, an incorrect active ingredient, which may or may not be toxic, or an incorrect amount of the active ingredient. For certain classes of drugs (e.g. antibiotics), quality problems can increase the likelihood of drug resistance. Consumers who take unsafe or ineffective drugs may die, become ill, or remain sick longer than they otherwise would have with safe and effective drugs. For examples of adverse events associated with unsafe, ineffective, and counterfeit drugs, see section I of the proposed rule (79 FR 25758).

Consumers taking ineffective and unsafe drugs also waste financial resources on the violative drug with no benefit and may lose confidence in the healthcare industry. In addition to the direct consequences faced by the consumer of unsafe and ineffective drugs, death and unexpected or prolonged illness have negative effects on the finances, quality of life, and productivity of friends and family members. Any reduction in the consumption of violative drugs would decrease the likelihood of illness, death, or the development of resistant strains of bacteria.

2. Possible Benefits to United States Pharmaceutical Producers

Imported, counterfeit versions of legitimate drugs may nonetheless be attractive to American consumers due to their often lower prices. The purchase of counterfeit drugs may result in four negative effects on the drug industry. First, when consumers substitute the counterfeit drug for the legitimate drug the producer of the legitimate drug sells fewer drugs, resulting in lower revenues. Second, firms must devote resources to defending their brand against counterfeiters with legal counsel, anti-counterfeit investigations, and anti-counterfeiting technologies. Third, consumers who unknowingly purchase an ineffective, unsafe, or counterfeit drug may lose confidence in the legitimate drug's manufacturer. Finally, the prevalence of counterfeit drugs may reduce a firm's desire to invest in the research and development of new drugs. Any reduction in the consumption of unapproved and counterfeit drugs may decrease these adverse effects on the drug industry.

3. Possible Transfer to Express Couriers

Currently, once a drug is refused entry at an express courier hub, the drug is either exported or destroyed within ninety days. We assume express couriers choose whether to export or destroy the refused drug and that they initially bear all the expenses. With adoption of the proposed rule, we assume that FDA, not the express couriers, would bear the cost of destruction. The estimated benefit of the proposed rule, if finalized, to express couriers includes the additional benefit of having FDA assume the cost to destroy a refused drug as opposed to the costs they currently bear to export or destroy the refused drug. If we assume all refused drugs would be destroyed, express couriers would receive a net benefit equal to a cost savings of not having to destroy or export refused drugs. Over the last 3 fiscal years, an average of 2,100 drug shipments has been refused at express courier hubs each year.

The cost of exporting a product once it has been refused entry into the United States includes the cost for use of physical and human resources. To get an estimate of how much it costs to return a drug received at an express courier hub we reviewed international shipping costs for packages valued at $1 and $2,500 weighing 1 or 20 pounds from several express couriers. We estimate it costs, on average, between $122 and $370 to mail a package via an express courier. Therefore, we estimate it would cost express couriers between $259,000 (= $122 per drug * 2,100 refused drugs) to $790,000 (= $370 per drug * 2,100 refused drugs).

The cost associated with the destruction of the drug includes the cost for use of physical and human resources. We assume express couriers would use a contractor to destroy a refused drug by incineration. We estimate the contracted cost to destroy each drug will be between $0.25 and $2 per pound. We use 1 pound to 20 pounds per refusal for our destruction costs. Therefore, with 2,100 destructions per year we estimate the primary cost would be in the range of $525 (= $0.25 per pound * 1 pound per destruction * 2,100 destructions) to $84,000 (= $2 per pound * 20 pounds per destruction * 2,100 destructions).

We assume the express courier will send the drug to be destroyed to the contractor. We estimate it costs, on average, between $10 and $50 to mail a package domestically, depending on

the size. If 2,100 drugs are mailed to contractors each year, we estimate the costs to be $21,000 (= $10 per package * 2,100 packages) and $105,000 (= $50 per package * 2,100 packages).

The total cost of destroying the drug will be the summation of the physical cost of destruction and the cost of mailing the drug to the contractor for incineration. We estimate the total cost of destroying 2,100 drugs each year to range from $22,000 (= $525 for destruction + $21,000 for mailing) to $190,000 (= $84,000 for destruction + $105,000 for mailing).

If FDA destroys these refused drugs, express couriers would have their costs reduced between $22,000 and $790,000 annually. These potential cost savings are presented with potential costs of the proposed rule in Table 3. FDA requests comments on the costs to express couriers to destroy or export a refused drug that has been shipped into the United States via an express courier.

F. Costs of the Proposed Rule

The proposed rule, if finalized, may result in increased costs to FDA that includes the additional cost of destroying the refused drug. Our analysis assumes FDA would choose to destroy all unapproved, adulterated, or misbranded drugs valued at $2,500 or less that have been refused admission into the United States. Therefore, the numbers produced in this section represent an upper bound.

We analyze the cost of administrative destruction actions relative to the baseline of taking the actions FDA would have taken prior to having received authority to take administrative destruction actions. Therefore, only the costs that go beyond the costs of exporting a refused drug are relevant here. Other potential costs may be incurred by industry if FDA decides not to destroy a drug after a challenge by the owner or consignee and the drug is subsequently released. The costs presented in this section represent only the potential negative impacts of the proposed regulation according to the assumptions made in section D. Costs as a result of relaxing these assumptions are presented in sections G and H.

1. Costs of Destroying a Refused Drug

The primary cost of the proposed rule, if finalized, would be the actual destruction of the refused drug once it has met the criteria mentioned earlier in this document. Because the destruction of the refused drug is not in addition to exporting the drug, in order to get an estimate of the additional cost of the proposed regulation we must take into account the difference between destroying and exporting a drug. Currently, drug parcels that are refused admission at IMFs are exported at the expense of USPS. For drugs that are refused admission at express courier hubs and at air, land, and sea ports of entry, the importer must export or destroy the drug within ninety days.

Table 3 – Summary of Costs Associated with Exporting and Destroying a Drug

	Commercial Port	Courier	IMF
Average Number Refused	3,100	2,100	6,900
Cost Per Exported Drug	$0		
Lower Estimate		$122	$48
Upper Estimate		$370	$133
Total Cost to Export	$0		
Lower Estimate		$259,000	$330,000
Upper Estimate		$790,000	$918,000
Total Cost to Destroy			
Lower Estimate	$32,000	$22,000	$71,000
Upper Estimate	$280,000	$191,000	$621,000

The cost of exporting a drug includes the cost for use of physical and human resources. To get an estimate of how much it costs to return a good received at an IMF, we reviewed international shipping costs for packages valued at $1 and $2,500 weighing 1 or 20 pounds from USPS. We estimate it costs between $48 and $133 to mail a package via USPS. Over the last 3 fiscal years, approximately 6,900 drug parcels (drug has a value of $2,500 or less) have been refused at IMFs each year. Having FDA destroy these refused drug parcels would save USPS between $330,000 (= $48 per exported package * 6,900 drug parcels) and $918,000 (= $133 per exported package * 6,900 drug parcels) annually.

We do not include the cost to export a drug from an air, land, or sea port. We consider cost savings to USPS and the couriers because, although they take possession of the package, they never take "ownership" in the sense of being responsible for the package contents or receiving benefits from the good itself. The importer at an air, land, or sea port, by contrast, has responsibility for the good itself because they take possession of the detained articles while the admissibility determination is pending.

No matter which port the violative product enters, the importer loses a product with zero value. The value of an illegal or violative product is not appropriate to include in benefit-cost analysis. At the non-courier, non-IMF ports, the importer makes the decision to receive the product and in essence vouches for it; any costs they then bear if it is a violative drug do not "count" because the product has no value. If, however, FDA takes charge of disposing of the product, FDA would bear the cost of destruction.

The cost associated with the destruction of a drug includes the cost for use of physical and human resources. We assume destruction will occur by incineration and destruction will be contracted out to another government agency or a private firm. We estimate the contracted cost to destroy each drug will be between $0.25 and $2 per pound. We use 1 pound to 20 pounds per refusal for our destruction costs. Therefore, with 12,100 destructions per year we estimate the primary cost would be in the range of $3,025 (= $0.25 per pound * 1 pound per destruction * 12,100 destructions) to $484,000 (= $2 per pound * 20 pounds per destruction * 12,100 destructions).

We anticipate being able to send the drug to be destroyed to the contractor via mail or express courier. We estimate it costs, on average, between $10 and $50 to mail a package domestically, depending on the size. If 12,100 drugs are mailed to contractors each year, we estimate the costs to be $121,000 (= $10 per package * 12,100 packages) and $605,000 (= $50 per package * 12,100 packages).

The total cost of destroying the drug will be the summation of the physical cost of destruction and the cost of mailing the drug to the contractor for incineration. We estimate the total cost of destroying 12,100 drugs each year to range from $124,000 (= $3,025 for destruction + $121,000 for mailing) to $1,091,000 (= $484,000 for destruction + $605,000 for mailing).

As we discussed earlier, the cost of this proposed rule, if finalized, would be the difference between the costs of destruction and the cost of exporting the refused drug. Therefore, we estimate the additional cost to the public sector for destroying refused drugs valued at $2,500 or less to be between -$206,000 (= $124,000 cost to FDA to destroy each year - $330,000 cost to USPS to export each year) and $173,000 (= $1,091,000 cost to FDA to destroy each year - $918,000 cost to USPS to export each year) per year, where a negative value represents a cost savings. Table 3 presents the costs associated with exporting and destroying a drug at IMFs, express couriers, and air, land, and sea ports. FDA requests comments on the calculation of the costs of destroying a refused drug presented here.

2. Other Possible Enforcement or Regulatory Costs

Differences in other enforcement or regulatory costs associated with refusals and administrative destruction actions may also be relevant to this analysis. These costs include the costs to FDA and owners or consignees of the drug associated with preparing for the administrative destruction action and the storage costs to FDA associated with holding the product before it is destroyed. We do not include the costs of preparing for the determination that a refused drug should be destroyed because we assume the FDA compliance officer will make the determination to pursue destruction at the same time as the determination to refuse the product, and the destruction notice and proceedings will be combined with the refusal notice and proceedings. We also do not anticipate a storage time between the determination to destroy and the destruction of the drug that is different from the storage time between the determination to refuse entry and the drug being shipped back to its address of origin. In short, we estimate that administrative destructions will not result in any additional regulatory or storage costs. FDA requests comments on the exclusion of the costs of preparing for the administrative destruction action and of storing the refused drug before destruction.

3. Summary of Total Net Social Costs

FDA estimates that implementing the proposed rule may result in an average annual range of $228,000 (= -$206,000 - $22,000) to $617,000 (= $173,000 - $790,000) in quantifiable net social benefits. This range represents a best estimate given the information available and the assumptions made in section D. In all cases, we based the low end of the range on the rates of shipping and destruction costs for 1-pound packages. The upper end is based on the rates of shipping and destruction costs for 20-pound packages.

Table 4 presents a summary of the estimated quantifiable total net social costs that may result with the implementation of the proposed rule based on the assumptions presented in section D, where negative values represent a benefit. In the following two sections, G and H, we relax our assumptions and present alternative scenarios with their associated costs in order to reflect all possible uses of this authority.

Additional uncertainties are associated with these cost estimates, but are not reflected in the ranges reported in Table 4. Additional costs to FDA associated with notifying the owner or consignee of the refused drug, storing the refused drug, and preparing for challenges to destruction by owners or consignees are not included because we assume the process of notifying, storing, and providing the opportunity to appear and introduce testimony on the destruction of a drug would be combined with the process of notifying, storing, and providing the opportunity to appear and introduce testimony on the refusal of a drug. We address several of these uncertainties in the following two sections.

G. Sensitivity Analysis

It is possible that FDA would not destroy all drugs valued at $2,500 or less that are refused entry into the United States due to resource constraints or other considerations. Table 5 presents the Total Net Annual Social Benefits of FDA choosing to destroy 25 percent, 50 percent, and 75 percent of refused drugs valued at $2,500 or less, and the Total Net Annual Social Benefits of FDA choosing to perform its destruction authority at the IMFs only where we assume every drug parcel that is refused admission at an IMF will be destroyed. We do not relax any of the other assumptions presented in section D in these results. In all cases, we based the low end of the range on the rates of shipping and destruction costs for 1-pound packages. The upper end is based on the rates of shipping and destruction costs for 20-pound packages. FDA requests comments on the calculation of the costs of destroying a refused drug presented here.

H. Operational Alternatives

In this section we present the net social costs associated with relaxing the assumptions that destruction would be contracted out, FDA would always combine the notice of destruction with the notice of refusal, and FDA would always combine the opportunity to present testimony for destruction with the opportunity to present testimony for refusal. The net impacts of relaxing these assumptions are presented in Table 6. We continue to assume we would destroy all refused drugs. Therefore, values in Table 6 can be thought of as costs in addition to the impact presented in Table 4.

1. Net Effect of FDA Handling Destruction Regionally

It is possible FDA would not, for policy reasons, contract for the destruction of a refused drug valued at or below $2,500 with another government agency or private firm. If this is the case, FDA would be responsible for the purchase of the equipment needed to destroy the drug, training of staff to perform the destruction, and other costs related to the actual destruction of the refused drug, such as labor and fuel costs.

Table 4 – Net Annual Social Costs of Destroying a Refused Drug by Entry Point

	Commercial Port	Courier	IMF	Total
Lower Estimate	$32,000	$0	-$259,000	**-$228,000**
Upper Estimate	$280,000	-$599,000	-$297,000	**-$617,000**

a. Purchase of Destruction Equipment

If FDA were to choose to destroy the refused drugs itself, the Agency anticipates purchasing at most 1 incinerator for each of its five import regions. We estimate that an incinerator that may be used to destroy a refused drug could cost between $10,000 and $250,000 depending on the size and features. Therefore, we estimate the cost to purchase the equipment needed to destroy refused drugs with a reported value of $2,500 or less to be between $50,000 (= 5 furnaces * $10,000 per furnace) and $1,250,000 (= 5 furnaces * $250,000 per furnace). This represents an initial cost and would not be an annual expense. It also represents the highest-cost destruction scenario.

b. Training in Destruction for FDA Staff

At least two FDA employees in each region may need to receive annual training in order to perform a proper destruction of a refused drug, with each training session being 4 hours long and administered by an FDA employee. We estimate the value of each FDA representative's time based on the hourly wage rate of a GS-10, step 5 employee, plus 100 percent benefits and overhead. The 2012 General Schedule Base Pay for this employee was approximately $25 per hour (Ref. 12). Including benefits and overhead gives an hourly rate of $50 (= $25 * 2). If three employees (1 instructor and 2 attendees) participate in a 4-hour training session at each location each year, we estimate it could cost FDA approximately $3,000 (= $50 wage rate * 3 FDA employees * 4 hours of training * 5 training sessions) annually.

c. Costs Associated with Each Destruction Act

We estimate each furnace would be able to incinerate 30 – 50 pounds of drugs each hour. We approximate each refused drug valued at $2,500 or less to weigh between 1 and 20 pounds. Therefore, we estimate it would take between 2 and 40 minutes of work for one employee to destroy each refused drug. Therefore the estimated labor costs range between $2 (= 2 / 60 minutes * $50 per hour) and $33 (= 40 / 60 minutes * $50 per hour) per destroyed drug. This represents a total annual labor cost of $20,000 (= $2 labor cost per destroyed drug * 12,100 destructions) to $404,000 (= $33 labor cost per destroyed drug * 12,100 destructions).

FDA would also incur fuel and other resource costs; we estimate that the resource-related costs would be between $16 and $32 for each act of destruction. This would add an additional $194,000 (= $16 in resource costs per destruction * 12,100 destructions) to $388,000 (= $32 in resource costs per destruction * 12,100 destructions) to annual costs.

We anticipate being able to send the drug to be destroyed via mail or express courier. We estimate it costs, on average, between $10 and $50 to mail a package domestically, depending on the size of the package. It is possible that some of the refused drugs will be destroyed at the

Table 5 – Sensitivity Analysis Net Social Benefits of Destroying a Refused Drug

	Number of Drugs Destroyed	Lower Estimate	Upper Estimate
Destroy 25% of Refused Drugs	3,000	$57,000	$154,000
Destroy 50% of Refused Drugs	6,050	$114,000	$308,000
Destroy 75% of Refused Drugs	9,100	$171,000	$462,000
Destroy Only Refused Drugs at IMFs	6,900	$259,000	$297,000

facility where they were detained. However, we cannot predict the distribution of destroyed drugs around the United States. Therefore, we anticipate a maximum of 12,100 drugs would be mailed to an FDA destruction facility each year. We estimate the cost of mailing drugs to be destroyed to an FDA destruction facility to be between $121,000 (= $10 per package * 12,100 packages) and $606,000 (= $50 per package * 12,100 packages).

d. Total Net Effect of FDA Handling Destruction Regionally

Under this highest-cost scenario for destroying refused drugs valued at $2,500 or less, FDA would incur an upfront cost of $50,000 to $1.25 million for the purchase of the equipment. The annual costs of FDA destroying the refused drugs would be the summation of all training, labor, other resource costs and the cost of mailing the drug to the incinerator. We estimate these annual costs to be between $339,000 (= $3,000 in training costs + $20,000 in labor costs + $194,000 in fuel and other costs + $121,000 for mailing) to $1,402,000 (= $3,000 in training costs + $404,000 in labor costs + $388,000 in fuel and other costs + $606,000 for mailing).

The net impact of FDA destroying all refused drugs valued at $2,500 or less annually is the difference between the annual costs presented in the above paragraph and the annual costs of destruction presented in Table 3. We estimate the additional annual costs of FDA performing its own destruction to range between $214,000 (= $339,000 - $124,000) and $310,000 (= $1,402,000 - $1,091,000). These values are in addition to the up-front purchase of destruction equipment. FDA requests comments on the calculation of all the costs of FDA destroying a refused drug itself as presented here.

2. Net Effect of Not Combining Notices of Destruction with Notices of Refusal

According to the proposed rule, FDA would have the option to combine the notices of the intent to destroy and the Agency's destruction decision with the notices of the intent to refuse and the Agency's refusal decision for each detained drug valued at $2,500 or less. Our primary estimates assume these notices will be combined. Since there would be no additional cost to combining the notices, we did not include notification as a cost. However, FDA may choose not to combine the notices, and instead send a separate notice for intent to destroy and notification of destruction. Assuming this scenario, we anticipate FDA would incur labor and resource costs for each correspondence with the owner or consignee of a refused drug valued at or below $2,500 that FDA intends to destroy. Labor costs include the time needed for a GS-10, step 5 employee, to create the notification and send the notice to the owner or consignee. We estimate it would take 0.5 hours of labor for each correspondence at a fully-loaded wage rate of $50. This gives us an estimate of $25 for each notification. We assume the notices would not be sent electronically

Table 6 – Summary of Net Impacts of Operational Alternatives

	Lower Estimate	Upper Estimate
FDA Destroys Refused Drug:		
Up-front Costs	$50,000	$1,250,000
Annual Costs	$214,000	$310,000
FDA Sends Separate Destruction Notices	$612,000	$619,000
Storage of Refused Drug	$902,000	$2,707,000

and resource costs, such as ink, paper, and envelopes, are estimated to be between $0.25 and $0.50 per notification.

We assume that FDA would send two notifications for each of the 12,100 possible destructions each year. This would result in FDA sending 24,200 notifications. At a labor cost of $25 per notification and a resource cost between $0.25 and $0.50 per notification, we estimate the total cost of not combining notices of destruction with notices of refusal to be between $612,000 (= [$25 labor cost per notification * 24,200 notifications] + [$0.25 resource cost per notification * 24,200 notifications]) and $619,000 (= [$25 labor cost per notification * 24,200 notifications] + [$0.50 resource cost per notification * 24,200 notifications]) annually. FDA requests comments on the calculation of the costs associated with FDA providing a separate notice to the owner or consignee of the Agency's intent to destroy the refused drug.

3. Net Effect of Not Combining the Opportunity to Testify on Refusal and Destruction

According to the proposed rule, the notice of the intent to destroy would specify a time period during which the owner or consignee may challenge FDA's intent to destroy, either orally or in writing. Currently, an owner or consignee has the opportunity to appear and present testimony to FDA on refusal. If the notices and hearings on refusal and destruction are combined, we do not anticipate the need for FDA to expend additional resources on the destruction component of a hearing if requested by the owner or consignee, as the Agency will have already anticipated destruction if the drug is refused. However, if the opportunities to present testimony on refusal and destruction are not combined, for reasons including the FDA receiving additional information about the drug after the refusal notice has been issued or the owner or consignee petitioning for and failing to complete reconditioning approved by FDA, FDA may need to hold the refused drug for the time period encompassing the required notice and opportunity for the owner or consignee to appear and present testimony on the destruction.

Storing the drug would take up space that could be used for other operations. We estimate the opportunity cost of the space needed to store each refused drug may be between $5 and $15. It is reasonable to expect FDA to allow up to 20 days for the owner or consignee to request to introduce testimony concerning FDA's decision to destroy. If a refused drug is held up 20 days, total storage costs for that drug may cost between $100 (= $5 per day * 20 days) and $300 (= $15 per day * 20 days).

When estimating the total possible storage costs subject to this proposed rule, we must consider who holds the refused drug during the period of time when the owner or consignee has

the opportunity to introduce testimony. We assume that at the IMF, FDA would maintain possession; at the express courier hub, the express courier would maintain possession, and at the air, land and sea ports, the importer would maintain possession. We consider only the storage costs at the IMFs and the express courier hubs. Our analysis only considers storage costs to the importer at the other ports of entry in circumstances where FDA determines, after notice to the owner or consignee, that the drug may be released for entry into the United States.

FDA refuses approximately 9,000 drugs valued at $2,500 or less at the IMFs and express courier hubs annually. Multiplying by the total cost to store a drug for up to 20 days, we estimate the cost of not combining the opportunity to present testimony on refusals and destruction to range between $902,000 (= $100 cost to store each drug * 9,000 refused drugs) and $2,707,000 (= $300 cost to store each drug * 9,000 refused drugs) each year. FDA requests comments on the calculation of the costs associated with needing to store the refused drug before it can be destroyed.

I. International Effects

The pharmaceutical industry is global, with manufacturing and consumption of a product often taking place in different parts of the world. The proposed rule would permit FDA to destroy drugs valued at $2,500 or less (or such higher amount as the Secretary of the Treasury may set by regulation) that have been refused. Foreign firms exporting compliant drugs for distribution in the United States would not be affected by this proposed rule. The proposed rule would be unlikely to alter the current mix of foreign and domestic manufacturing for the affected products.

J. Distributional Effects

As mentioned earlier, there would be a distributional effect among government agencies if the proposed rule is finalized. Currently, refused drug parcels at IMFs that can be exported are returned to USPS for export. USPS bears the burden of returning these drugs with no reimbursement from FDA. The proposed rule would likely eliminate a portion of USPS's export burden due to the refused drug being destroyed.

In addition, owners or consignees of destroyed drugs are liable for the costs of destroying and storing the drug prior to destruction. Funds charged to and received from the owners and consignees of the destroyed drug will act as a transfer to FDA for reimbursement related to the costs of destroying the drug.

III. Initial Regulatory Flexibility Analysis

FDA has examined the economic implications of the proposed rule as required by the Regulatory Flexibility Act. If a rule will have a significant economic impact on a substantial number of small entities, the Regulatory Flexibility Act requires agencies to analyze regulatory options that would lessen the economic effect of the rule on small entities. In the proposed rule, small entities will bear costs to the extent that they are responsible for the violative product. The number of expected destructions per year along with the very small value per event implies that

this burden would not be significant, so we presume that this proposed rule would not have a significant economic impact on a substantial number of small entities. This analysis, together with other relevant sections of this document, serves as the Initial Regulatory Flexibility Analysis, as required under the Regulatory Flexibility Act.

IV. References

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