

**Economic Analysis of the  
Final Rule for Fees for the  
Administration of the Toxic  
Substances Control Act, EPA-  
HQ-OPPT-2017-0401; RIN  
2070-AK27)**

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**Economic and Policy Analysis Branch**

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## Glossary

BLS	U.S. Bureau of Labor Statistics
CBI	Confidential Business Information
CDX	Central Data Exchange
CFR	Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
ICR	Independent Cost Request
LVE	Low Volume Exemption
MCAN	Microbial Commercial Activity Notice
NAICS	North American Industry Classification System
NOC	Notice of Commencement
PMN	Pre-Manufacture Notice
PPI	Producer Price Index
RFA	Regulatory Flexibility Act
SBA	Small Business Administration
SBREFA	Small Business Regulatory Enforcement Fairness Act
SNUN	Significant New Use Notice
SNUR	Significant New Use Rule
TERA	TSCA Environmental Release Application
TME	Test Marketing Exemption
TSCA	Toxic Substances Control Act

## Contributors

The EPA analyst responsible for this report was Stephanie Suazo. Analytical and draft preparation support was provided by Abt Associates Inc. under Contract #EP-W-16-009.

## Executive Summary

As permissible under section 26(b) of the Toxic Substances Control Act (TSCA or the Act), the Environmental Protection Agency (EPA or the Agency) is finalizing a rule to establish fees applicable to any person required to submit information to the EPA under the Toxic Substances Control Act (TSCA) TSCA section 4 or a notice, including an exemption or other information, to be reviewed by the Administrator under TSCA section 5, or who manufactures (including imports) a chemical substance that is the subject of a risk evaluation under TSCA section 6(b). This final rulemaking provides a description of the final TSCA fees and fee categories for fiscal years 2019, 2020, and 2021, and explains the methodology by which the final rule TSCA fees were determined and would be determined for subsequent fiscal years. In finalizing these new TSCA fees, the Agency is also finalizing amendments to long standing fee regulations governing the review of premanufacture notices, exemption applications and notices, and significant new use notices. Implementation of this rule will result in certain manufacturers and processors being required to pay a prescribed fee for specific fee-triggering events under TSCA sections 4, 5, and 6 in order for EPA to recover some costs associated with carrying out its responsibilities under TSCA. With this action, EPA is also finalizing standards for determining which persons qualify as small business concerns and thus would be subject to lower fee payments.

Overall, EPA developed eight fee categories for TSCA sections 4, 5, and 6. TSCA section 4 actions include Test Orders, Test Rules, and Enforceable Consent Agreements (ECAs). TSCA section 5 actions include Pre-Manufacture Notices (PMNs), Significant New Use Notifications (SNUNs), Microbial Commercial Activity Notices (MCANs), Low Volume Exemptions (LVEs), Test Marketing Exemption Applications (TMEs), Low Release/Low Exposure Exemptions (LoREX), TSCA Experimental Release Application (TERAs), Tier II Exemptions, and Film Article Exemptions. Finally, TSCA section 6 comprises both Agency-initiated and manufacturer-requested risk evaluations.

EPA estimates total annualized fees collected from industry are approximately \$19.9 million, excluding fees collected for manufacturer-requested risk evaluations.<sup>1</sup> Annualized fee collections were calculated by multiplying the estimated number of actions by the corresponding fee. Additional information can be found in Chapter 3 of this Economic Analysis.

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<sup>1</sup> The fees shown in this economic analysis for manufacturer-requested Risk Evaluations are not set fees like the EPA-initiated RE fees, but rather are estimated as being the same as the fees for EPA-initiated REs for analytical purposes only. The actual fees charged for manufacturer requested Risk Evaluations will be determined on a case-by-case basis, based on actual costs to the Agency.

<b>Table ES 1-1: Summary of TSCA User Fees</b>			
<b>TSCA Activity</b>	<b>General Fee/Action</b>	<b>Estimated Activity Level (Annual)</b>	<b>Fee Collection (Initial)</b>
<b>TSCA section 4</b>			
Test Orders	\$9,800	10	\$98,000
Test Rules	\$29,500	1 every other year	\$29,500
ECAs	\$22,800	1 every other year	\$22,800
<b>TSCA section 5</b>			
PMN/MCAN/SNUN	\$16,000	376	\$6,016,000
Exemptions	\$4,700	456	\$2,143,200
<b>TSCA section 6</b>			
EPA-Initiated Risk Evaluations	\$1,350,000	25 ongoing over three-year period	\$11,250,000
<b>Total Collections from General Fees</b>			<b>\$19,559,500</b>
<b>TSCA Activity</b>	<b>Small Business Fee/Action</b>	<b>Estimated Activity Level (Annual) (2)</b>	<b>Fee Revenue Collected (Initial)</b>
<b>TSCA section 4</b>			
Test Orders	\$1,950		
Test Rules	\$5,900		
ECAs	\$4,600		
<b>TSCA section 5</b>			
PMN/MCAN/SNUN	\$2,800	86	\$240,800
Exemptions	\$940	104	\$97,760
<b>TSCA section 6</b>			
EPA-Initiated Risk Evaluations	\$270,000		
<b>Total Collections from Small Business Fees</b>			<b>\$338,560</b>
Notes:			
Total may not add up due to rounding.			
(1) For all fee categories, the reduced fee is only available when the only entity or entities are small businesses, including when a consortium is paying the fee and all members of that consortium are small businesses.			
(2) EPA did not account for instances in which all entities are small businesses in its Agency cost estimates.			

## Potentially Affected Entities

EPA expects chemical manufacturing to be the primary industry sector affected by the final rule. Additionally, EPA expects the petroleum refineries industry sector and firms in the merchant wholesale sectors for chemicals and petroleum to be affected by the final rule. The 33 industry sectors expected to be affected by the final rule are presented in Table ES 1-2.

**Table ES 1-2: Industries Expected to Be Impacted by Final Rule**

NAICS Code	NAICS Name
324110	Petroleum refineries
325110	Petrochemical manufacturing
325120	Industrial gas manufacturing
325130	Synthetic organic dye and pigment manufacturing
325180	All other basic inorganic chemical manufacturing
325193	Ethyl Alcohol Manufacturing
325194	Cyclic crude and intermediate manufacturing
325199	All other basic organic chemical manufacturing
325211	Plastics material and resin manufacturing
325212	Synthetic Rubber Manufacturing
325220	Artificial and Synthetic Fibers and Filaments Manufacturing
325311	Nitrogenous Fertilizer Manufacturing
325312	Phosphatic Fertilizer Manufacturing
325314	Fertilizer (Mixing Only) Manufacturing
325320	Pesticide and Other Agricultural Chemical Manufacturing
325411	Medicinal and botanical manufacturing
325412	Pharmaceutical preparation manufacturing
325413	In-Vitro Diagnostic Substance Manufacturing
325414	Biological Product (except Diagnostic) Manufacturing
325510	Paint and Coating Manufacturing
325520	Adhesive manufacturing
325611	Soap and other detergent manufacturing
325612	Polish and other sanitation good manufacturing
325613	Surface active agent manufacturing
325620	Toilet Preparation Manufacturing
325910	Printing Ink Manufacturing
325920	Explosives Manufacturing
325991	Custom compounding of purchased resins
325992	Photographic film, paper, plate, and chemical manufacturing
325998	All other miscellaneous chemical product and preparation manufacturing
424690	Other Chemical and Allied Products Merchant Wholesalers
424710	Petroleum Bulk Stations and Terminals
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)

## Benefits

The principal benefit of the final rule is to provide EPA a sustainable source of funding necessary to implement TSCA as mandated under the Frank R. Lautenberg Chemical Safety for the 21st Century Act. The benefits of TSCA regulation are described broadly in Chapter 4 of this Economic Analysis with respect to TSCA section 4, TSCA section 5, and TSCA section 6. Specific benefits can be found in the economic analyses on chemicals regulated under TSCA.

## Total Social Costs

Total social cost of this final rule includes the additional EPA costs to administer sections 4, 5, 6, and collecting, processing, reviewing, and providing access to and protecting information about chemical substances from disclosure as appropriate under TSCA section 14 as mandated by Congress through

the Toxic Substances Control Act as amended by the Lautenberg Act, and the opportunity costs incurred by affected chemical manufacturers (including importers) and processors, such as the cost to:

- read and familiarize themselves with the rule;
- determine their eligibility for paying reduced fees;
- register for CDX;
- form, manage and notify EPA of participation in consortia;
- notify EPA and certify whether they will be subject to the action or not; and
- arrange to submit fee payments via Pay.gov.

On average, the estimated total cost incurred by affected firms for TSCA sections 4, 5, and 6 actions is approximately \$231,000. The total social cost does not include the fees incurred by firms and collected by EPA, as these fees are established to recoup a portion of EPA costs that are currently borne by taxpayers through Congressional budget appropriations, which stem from general tax revenue that would now be transferred to affected manufacturers and processors in the form of fees<sup>2</sup>.

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<sup>2</sup> As further discussed in Section 3.1

<b>Table ES 1-3: Annualized Industry Opportunity Costs (\$2018)<sup>1</sup></b>					
<b>Activity/Respondent</b>	<b>Number of Respondents</b>	<b>Burden per Response (hours)</b>	<b>Total Burden (hours)</b>	<b>Cost per Respondent</b>	<b>Total Cost</b>
<b>Rule Familiarization</b>					
Section 4 Actions	336	0.167	56	\$13.09	\$4,398
Section 5 Actions	1,022	0.167	170	\$13.09	\$13,378
Section 6 Actions	60	0.167	10	\$13.09	\$785
<b>Notification of Participation in Consortia</b>					
Section 4 Actions	12	0.083	1.00	\$6.55	\$79
Section 6 Actions	8	0.083	0.69	\$6.55	\$55
<b>CDX Registration</b>					
Section 6 Actions	58	0.17	9.67	\$13.09	\$759
<b>Reduced Fee Eligibility Determination</b>					
Section 4 Actions	84	0.167	14	\$12.97	\$1,090
Section 5 Actions	164	0.167	27	\$12.97	\$2,127
Section 6 Actions	24	0.167	4	\$12.97	\$311
<b>Fee Payment through Pay.gov</b>					
Section 4 Actions	12	0.167	2	\$13.09	\$157
Section 5 Actions	1,022	0.167	170	\$13.09	\$13,378
Section 6 Actions	10	0.167	2	\$13.09	\$131
<b>Self-Identification and Certification</b>					
Section 4 Actions	28	0.833	23	\$58.23	\$1,630
Section 6 Actions	58	0.833	48	\$58.23	\$3,377
<b>Total Burden for all Activities</b>					
<b>Section 4 Actions</b>	<b>336</b>		<b>96</b>	<b>\$21.89</b>	<b>\$7,354</b>
<b>Section 5 Actions</b>	<b>1,022</b>		<b>368</b>	<b>\$28.26</b>	<b>\$28,883</b>
<b>Section 6 Actions</b>	<b>60</b>		<b>74</b>	<b>\$90.31</b>	<b>\$5,419</b>
<b>Total PRA</b>	<b>1,418</b>		<b>539</b>		<b>\$43,182</b>
<b>Consortia Non-Reporting Costs</b>					
Section 6 Actions	8			\$22,500	\$187,425
<b>Total Social Costs</b>	<b>1,418</b>		<b>539</b>		<b>\$230,607</b>
<sup>1</sup> Values may not calculate exactly due to rounding. Total burden and cost may be overestimated due to assumptions on the number of firms in consortia and first-time users of CDX.					

The Agency would also incur new costs as a result of this rule. The new Agency costs would be limited to all new tasks conducted by Agency staff as a result of the rule, including the collection and review of information about firms submitting TSCA fees and attendance of managers at meetings. Agency activities would include data collection, management and end-of-year summarization for

review in order to continue refining the estimated number of annual submissions and the costs of administering the final rule. EPA anticipates focusing on data management for fees associated with TSCA section 4 and TSCA section 6, as fee data has not previously been collected for actions under these sections of TSCA. EPA estimates this data management would require 80 hours of work per year for GS-13 Step 5 level employees in the Washington D.C. area. Total new annual Agency burden as a result of this final rule is estimated to be \$6,740.48. As a result, the total social cost of this final rule is estimated to be approximately \$238,000 per year.

### **Small Business Impacts**

TSCA section 5 actions are the only TSCA actions associated with a prescribed reduced fee for eligible small businesses. For TSCA sections 4 and 6 actions, EPA is finalizing an 80% discount on the portion of the fee to be paid by an affected eligible small business. This means that the specific reduced fees for eligible small businesses for TSCA sections 4 and 6 actions are dependent on the number of affected firms. Consequently, if there is only one affected firm for a TSCA section 4 or TSCA section 6 action and that firm is a small business, then the 80% discount will be applied to the full fee for the action: EPA will receive 80% less than the stipulated fee for that action.

In this analysis, affected small businesses are defined by size standards established by the Small Business Administration (SBA). However, for the purposes of setting TSCA fees, EPA is finalizing reduced fees for SBA-defined small businesses for affected entities from the chemical manufacturing (NAICS code 325), petroleum refinery (NAICS code 324110), chemical merchant wholesalers (NAICS code 424690), and petroleum merchant wholesalers (NAICS codes 424710 and 424720) sectors. If the NAICS code of a manufacturer is not represented in Table ES 1-2, it will be considered small if it has 500 or fewer employees. EPA determines that, on average, no small businesses are likely to experience significant impacts (i.e., cost impacts greater than 1% of their revenue).

EPA estimates the median annual sales for small businesses likely to be affected by TSCA section 4 and TSCA section 6 actions to be approximately \$5,445,000; and \$3,475,000 for small businesses likely to be affected by TSCA section 5 actions. Table ES 1-4 presents the number and proportion of small businesses that are expected to experience impacts under the final rule. More details can be found in Chapter 6 of this Economic Analysis. Overall, of the 298 small businesses that are expected to incur costs each year, all may pay fees equivalent to less than 1% of the average sales. Total estimated annualized fee payments from small businesses amount to approximately \$1,285,300 with \$14,100 from TSCA section 4 actions, \$344,100 from TSCA section 5 actions, and \$927,100 from TSCA section 6 actions. EPA estimates that total fees paid by small businesses will account for about 6% of the total fees to be collected for TSCA sections 4, 5, and 6 actions.

**Table ES 1-4: Annual Small Business Cost-Revenue Impacts for Firms Incurring Costs**

Final Fee Category	Small Business Reduced Fees + Opportunity Costs per Firm	Number of Small Businesses with Impacts < 1% and > 0%	Number of Small Businesses with Impacts < 3% and > 1%	Number of Small Businesses with Impacts > 3%
<b>TSCA section 4</b>				
Test Order	\$167	70 (23.5%)	0 (0.0%)	0 (0.0%)
Test Rule	\$250	7 (2.3%)	0 (0.0%)	0 (0.0%)
Enforceable Consent Agreement (ECA)	\$260	7 (2.3%)	0 (0.0%)	0 (0.0%)
<b>TSCA section 5</b>				
PMNs/MCAN/SNUN	\$2,829	86 (28.9%)	0 (0.0%)	0 (0.0%)
Exemption <sup>a</sup>	\$969	104 (34.9%)	0 (0.0%)	0 (0.0%)
<b>TSCA section 6</b>				
Risk Evaluation	\$38,630	24 (8.1%)	0 (0.0%)	0 (0.0%)
<b>Total</b>		298 (100.0%)	0 (0.0%)	0 (0.0%)

## 1. Introduction

The U.S. Environmental Protection Agency (EPA) has set fees applicable to any person required to submit information to the EPA under the Toxic Substances Control Act (TSCA) TSCA section 4 or a notice, including an exemption or other information, to be reviewed by the Administrator under TSCA section 5, or who manufactures (including imports) a chemical substance that is the subject of a risk evaluation under TSCA section 6(b). As such, the Agency has developed and finalized a rule establishing a fees framework for collecting fees to defray some of the costs associated with the requirements of the Toxic Substances Control Act (TSCA), as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. This chapter presents an overview of the economic justifications for the final rule. Section 1.1 describes the statutory authority for the final rule. Section 1.2 provides the regulatory background of this final rule, summarizing the regulations under TSCA sections associated with the final rule and the burden to the Agency. Section 1.3 explains the economic justifications for the final rule. Section 1.4 describes the organization of the remainder of this Economic Analysis.

### 1.1 Statutory Authority

The Toxic Substances Control Act (TSCA), as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, provides EPA authority to collect fees to defray the costs associated with administering TSCA sections 4, 5, and 6, as well as the costs of collecting, processing, reviewing, and providing access to and protecting chemical substances from disclosure as appropriate under TSCA section 14. This rule is final under Section 26(b) of TSCA, 15 U.S.C. 2625.

TSCA was enacted in 1976 to regulate the manufacture, import, processing, distribution, use, and disposal of chemical substances in the United States. On June 22, 2016, the President signed into law the Frank R. Lautenberg Chemical Safety for the 21st Century Act, amending TSCA. Among other provisions, the Lautenberg Act provides for EPA to collect fees designed to defray o 25 percent of the costs to carry out TSCA sections 4, 5, 6 and of collecting, processing, reviewing, and providing access to and protecting information about chemical substances from disclosure as appropriate under TSCA section 14 in fees. Previously, TSCA capped individual fees at \$2,500 and provided more limited fee collection authority (EPA, 2016a).

### 1.2 Regulatory Background

In 1976, TSCA section 26(b) provided the EPA with authority to require, by rule, the payment of fees by persons required to submit data under TSCA sections 4 and 5. TSCA section 26(b) capped the maximum fees for small business at \$100 and fees for all other entities at \$2,500. It was not until the Agency published a final a rule in 1988 that the EPA began requiring and collecting fees to pay for premanufacture notices (PMNs), and other submissions under TSCA section 5. Although authorized under the statute, the Agency has not historically collected fees for data submitted under TSCA section 4 and no TSCA section 4 fees rule was ever promulgated by the EPA.

Since 1988, with regard to submissions by small business concerns, the Agency has collected \$100 for each TSCA section 5 consolidated PMN, significant new use notice (SNUN), and certain exemption applications and notices. Only small businesses that met EPA's 1988 definition of \$40

million in revenues were charged the reduced fees capped by statute<sup>3</sup> at \$100 for all of the categories of actions under TSCA section 5. For submissions by all other firms, the EPA has collected \$2,500 for each TSCA section 5 notice other than intermediate PMNs, and \$1,000 for intermediate PMNs. These fees were set prior to the June 2016 amendments to TSCA and do not reflect the current cost of administering the TSCA sections associated with these submissions. In the past, several fiscal years, the EPA has consistently generated approximately \$1.1 million annually in fee revenue. The fees go to the General Fund of the U.S. Treasury and do not defray the EPA's costs. With the finalization of the TSCA Fees rule, the EPA's annually appropriated funds will be supplemented with the fees to cover some of the costs of administering TSCA, including the costs incurred by the Agency in addressing additional requirements imposed by the June 2016 amendments.

On June 22, 2016, the "Frank R. Lautenberg Chemical Safety for the 21st Century Act" was signed into law, amending numerous sections of TSCA. The amendments give the EPA improved authority to take actions to protect people and the environment from the effects of chemicals. The amendments also expand the EPA's existing TSCA fee authority and allow the Agency to establish and collect fees sufficient to defray a portion of the costs of administering certain TSCA requirements.

The amendments remove the \$100 cap on fees collected from small businesses and the \$2,500 cap on fees from other firms. Instead, the amendments require that, if fees are established for work under TSCA sections 4, 5 and/or 6, the Agency set lower fees for small business concerns and establish the fees so that they are designed to collect 25% of the Agency's costs to carry out work under section 4, 5, 6 and of collecting, processing, reviewing, and providing access to and protecting information about chemical substances from disclosure as appropriate under TSCA section 14 of the Act. In addition, in the case of a manufacturer-requested risk evaluation, the Agency is authorized to establish fees sufficient to defray 50% of the costs associated with conducting a manufacturer-requested risk evaluation on a chemical included in the TSCA Work Plan for Chemical Assessments: 2014 Update, and the full costs of conducting a manufacturer-requested risk evaluation for all other chemicals. The amendments also authorize fee revenue to be deposited into a new TSCA Service Fee Fund. This is intended to ensure that resources are made available to the Agency to defray the costs that the EPA incurs in carrying out activities under section 4, 5, 6 and of collecting, processing, reviewing, and providing access to and protecting information about chemical substances from disclosure as appropriate under TSCA section 14.

Currently, fees are only collected for certain submissions under section 5 of TSCA. These fees are established in 40 CFR §700.45. Under the Lautenberg Act's amendments to TSCA, the EPA has authority to require payment from firms who:

- Are required to submit information by Test Rule, Test Order or Enforceable Consent Agreement (TSCA section 4);
- Submit notification of or information related to intent to manufacture a new chemical or significant new use of a chemical (TSCA section 5);
- Manufacture a chemical substance that is subject to a risk evaluation, including a risk evaluation conducted at the request of a manufacturer (TSCA section 6(b)).

Beginning in fiscal year 2019 (October 1, 2018 through September 30, 2019), the EPA is required to adjust fees, as necessary, every three years to reflect inflation and ensure that fees are sufficient to

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<sup>3</sup> See 40 CFR 700.45(b)(1)

collect 25% of the costs to the Agency in administering sections 4, 5, 6 and of collecting, processing, reviewing, and providing access to and protecting information about chemical substances from disclosure as appropriate under TSCA section 14 of the Act. Before establishing new fees or revising any existing fees, the Agency is required to consult with manufacturers and processors, or their representatives.

### **1.2.1 TSCA section 4**

TSCA section 4, Testing of Chemical Substances and Mixtures, gives EPA the authority to require, by rule, order, or consent agreement, firms to conduct testing of identified chemical substances or mixtures. This testing is required to develop information on health or environmental effects when there is insufficient information for EPA risk assessors to be able to determine whether a chemical substance or mixture presents an unreasonable risk to health or the environment.<sup>4</sup>

The current industry burden, as reported in the TSCA section 4 Information Collection Request (ICR) supporting statement, associated with TSCA section 4 actions include submission of reports and study plans; new Central Data Exchange (CDX) registration; exemption application; and arranging for studies. EPA expects that, as in the past, multiple firms will be subject to each future TSCA section 4 action and allows for regulated companies to form consortia for each TSCA section 4 action. The consortium would be responsible for providing the requested information and paying the fee for the TSCA section 4 action.

EPA's activities associated with the administration of TSCA section 4 include:

- Rule/order development;
- Test plan review
- Compliance review
- Data analysis
- Data management
- Transparency
- Management of Confidential Business Information (EPA, 2016a).

Currently, manufacturers and processors subject to rules promulgated under TSCA section 4 are not required to pay a fee associated with these activities.

### **1.2.2 TSCA section 5**

TSCA section 5 requires that manufacturers and processors provide EPA with notice before initiating the manufacture of a new chemical substance or initiating the manufacturing or processing for a significant new use of a chemical substance. EPA is required to review and make affirmative determinations for new chemical submission and take risk management action, as needed.

Examples of the notices or other information that firms are required to submit under TSCA section 5 are Pre-Manufacture Notices (PMNs), Low Volume Exemptions (LVEs); Test Marketing Exemption Applications (TMEAs); Low Release/Low Exposure Exemptions (LoREX); Microbial Commercial Activity Notices (MCANs); TSCA Experimental Release Applications (TERAs); Notices of Commencement (NOCs), and Significant New Use Notifications (SNUNs).

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<sup>4</sup> See Pub. L. 114–182, title I, §§4, 19(d), June 22, 2016, 130 Stat. 449, 505 for further details.

Current industry burden activities for TSCA section 5 actions include reporting hours, recordkeeping, and CDX registration.

The amendments to TSCA now require EPA to provide affirmative determinations for all notices that EPA reviews. EPA's activities associated with the administration of TSCA section 5 include:

- Notice review/data analysis
- Development/refinement of analytical tools
- Order/rule development/risk reduction actions
- Affirmative determination
- Data management
- Transparency
- Management of Confidential Business Information (EPA, 2016a)

Under 40 CFR 700.45(b)(1), small business concerns currently must pay a fee of \$100 for each TSCA section 5 notice submitted. EPA is authorized under §700.45(b)(2) to request fees from other firms as follows:

- (i) PMNs and consolidated PMNs: \$2,500
- (ii) Intermediate PMNs: \$1,000
- (iii) SNUNs: \$2,500.
- (iv) Exemption applications: \$2,500
- (v) Exemption notices: \$2,500
- (vi) MCAN and consolidated MCAN: \$2,500

However, EPA did not require fees for TSCA section 5 exemptions.

### **1.2.3 TSCA section 6**

TSCA section 6, Prioritization, Risk Evaluation, and Regulation of Chemical Substances and Mixtures, provides EPA with the authority to regulate chemicals if the manufacture, processing, distribution in commerce, use, or disposal presents an unreasonable risk of injury to human health or the environment. Under the Lautenberg Act's amendments to TSCA, TSCA section 6 also requires EPA to perform risk evaluations: EPA must establish a risk-based screening process, including criteria for designating chemical substances as high-priority substances for risk evaluations or low-priority substances for which risk evaluations are not warranted at the time. Under TSCA section 6, EPA can require the submission of relevant information on a chemical substance in order to perform the risk evaluation.

Under the amendments to TSCA, EPA must be conducting at least 20 EPA-initiated risk evaluations at all times by the year 2020. In addition, firms may request a risk evaluation on a chemical substance; TSCA establishes that these requests are subject to the payment of a fee sufficient to defray 50% of the costs associated with conducting a risk evaluation on a chemical in the 2014 Work Plan and the full cost of conducting the risk evaluation for all other chemicals. EPA expects that multiple firms will be subject to each future TSCA section 6 actions and allows affected firms to form a consortium for the payment of fees associated with each TSCA section 6 action.

EPA's activities associated with the administration of TSCA section 6 include:

- Risk-based prioritization
- Risk evaluation – data gathering, data analysis, unreasonable risk determination

- Data management
- Transparency
- Confidential Business Information management
- Development/refinement of analytical tools
- Peer review, as appropriate
- Development of risk management actions

Currently, manufacturers of chemicals undergoing EPA risk-screening processes are not required to pay a fee associated with risk evaluations under TSCA section 6.

#### **1.2.4 TSCA section 14**

TSCA section 14, Confidential Business Information (CBI), pertains to collecting, processing, reviewing, and providing access to and protecting information about chemical substances from disclosure as appropriate under TSCA section 14. Under the amended TSCA, EPA is required to review all CBI claims for chemical identity and make a determination of whether such claims are substantiated, within 90 days of receipt, and review a representative 25 percent of other CBI substantiation claims within 90 days of receipt. Information will be considered CBI for a period of 10 years, unless the claim is reasserted. Cost estimates cover general information management under all relevant section of TSCA but do not include the costs of administering authorities other than those under TSCA section 4, 5, and 6 for collection such as those in TSCA section 8 and 11. EPA does not believe that Congress intended EPA to offset costs associated with administering authorities under these other sections. Costs also include Office of General Counsel costs associated with issuing TSCA CBI claim final determinations, and supporting guidance, policy and regulation development for TSCA Section 14 activities, e.g., implementing the unique identifier provisions, access to TSCA CBI for emergency personnel, states, tribes and local governments, the TSCA CBI sunset provisions, among others.

EPA's activities associated with the collecting, processing, reviewing, and providing access to and protecting information about chemical substances from disclosure as appropriate under TSCA section 14 include:

- CBI docket management
- Data Management specifically for receiving and managing CBI data
- Tracking and notification for reassertion of claims
- Claims Reviews
  - Prescreening/initial review
  - Substantive review and making final determinations
- Document review and sanitization
- Regulation development
- Implementation of the Unique Identifier Rule
- IT systems development
- Transparency/communications
- Implementing the requirements in TSCA section 14(d)
- Implementing the CBI sunset requirements
- Freedom of Information Act-Related CBI claim reviews
- Providing public access to Non-CBI Data and IT costs for operating and maintaining the CBI Local Area Network (LAN)

- Disclosure to authorized persons, including States
- Clearance and security procedures (EPA, 2016a)

Currently, firms are not required to pay a fee associated with the maintenance of CBI. EPA plans to continue this practice.

### 1.3 Statement of Need

The authority for EPA to collect fees to defray some of the costs associated with administering TSCA is a method of *privatization of finance*, as opposed to general taxation. Governments use this method to require specific “customers” to pay for the services they receive. While regulations under sections 4, 5, and 6 of TSCA provide health and environmental benefits to society as a whole (as described in Chapter 4), it must also be understood that the chemical manufacturer/processor profits financially by being able to sell a chemical that has been determined to not present an unreasonable risk. Therefore, it is appropriate that the firm share in the cost for this evaluation.

Mikesell (2013) identifies four general advantages of charges (e.g., fees): to register and record public demand for a service; to improve financing equity for the services; to improve the agency’s operating efficiency; and to correct cost-and-price signals in the private market. The advantages most relevant to this final rule are that fees can help improve financing equity, and to correct the cost-and-price signals.

**Improved financing equity.** Mikesell (2013) notes that “If the service is of a chargeable nature, its provision by general tax revenues will undoubtedly subsidize the service recipient group at the expense of the general taxpaying public.” The final rule increases social equity in that for a chemical company to profit from the goods that it produces, the company must share in the cost to implement the rules that gather and disseminate information about the chemical’s risk.

**Correct cost-and-price signals.** The implementation of a fee associated with TSCA sections 4, 5, and 6 may correct cost-and-price signals in the private market, in that the cost to the consumer of the regulated chemicals may include these costs. Therefore, the fee makes the consumer recognize and respond to the true social cost.

### 1.4 Organization of this Report

The remainder of this report provides EPA’s economic analysis in support of this final rule. Potentially affected entities are characterized in Chapter 2. Chapter 3 presents the estimated fee collection to be paid by affected firms under the final rule. Chapter 4 qualitatively addresses the benefits of the final rule. Chapter 5 presents the total social cost for this final rule. Chapter 6 provides the small entity impact analysis for the final rule, as mandated by the Regulatory Flexibility Act (RFA), and amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA). Several additional impact analyses are presented in Chapter 7.

Note that all dollar amounts in this analysis are reported in 2018 dollars.

## 2. Industry Profile

This chapter presents the number of entities that EPA estimates may be affected by the final rule. EPA estimates that chemical manufacturers, petroleum refineries, and chemical and petroleum wholesalers may be affected by the final rule, based on their engagement in TSCA actions. Therefore, the affected entities analyzed in this chapter include chemical manufacturers, petroleum manufacturers, and chemical and petroleum merchant wholesalers that may be subject to TSCA sections 4, 5 and 6 actions.

In order to estimate the scale and impact of the final rule, EPA has identified the types and number of firms that may potentially be subject to fees as a result of this final rulemaking. Section 2.1 presents the methodology for defining, counting, and identifying the sizes of the entities which may be affected by the final rule. Section 2.2 describes the chemical manufacturing industry sector; Section 2.3 describes the petroleum refineries industry sector; and Section 2.4 describes the chemical and petroleum merchant wholesaler industry sector.

### 2.1 Methodology

In order to estimate the scale and impact of the final rule, EPA has estimated the number of entities that will potentially be affected by this final rule and the size of these entities. Section 2.1.1 presents the list of affected industries and EPA's methods for determining this list.

For the purpose of this analysis, EPA used the Small Business Administration's (SBA) size standards (see Section 2.1.2).

#### 2.1.1 Universe of Potentially Affected Entities

EPA expects chemical manufacturing to be the primary industry sector affected by the final rule. EPA also expects that firms from the petroleum refining industry sector and the chemical and petroleum merchant wholesale industry sectors are likely to be affected by the final rule. The petroleum refining sector frequently engages in actions regulated under TSCA – in particular, TSCA section 5 significant new use applications.

Table 2-1 shows the North American Industry Classification System (NAICS) codes for all 33 industries that EPA estimates will be affected by the final rule. The list comprises all 29 6-digit NAICS code for the Chemical Manufacturing sector (NAICS code 325), the Petroleum Refinery sector (one NAICS code: 324110), and three 6-digit NAICS codes (424690, 424710, and 424720) from the Wholesale Trade sector to account for chemical and petroleum wholesalers.

**Table 2-1: Industries Expected to Be Affected by Final Rule**

<b>NAICS Code</b>	<b>NAICS Description</b>
324110	Petroleum refineries
325110	Petrochemical manufacturing
325120	Industrial gas manufacturing
325130	Synthetic organic dye and pigment manufacturing
325180	All other basic inorganic chemical manufacturing
325193	Ethyl Alcohol Manufacturing
325194	Cyclic crude and intermediate manufacturing
325199	All other basic organic chemical manufacturing
325211	Plastics material and resin manufacturing
325212	Synthetic Rubber Manufacturing
325220	Artificial and Synthetic Fibers and Filaments Manufacturing
325311	Nitrogenous Fertilizer Manufacturing
325312	Phosphatic Fertilizer Manufacturing
325314	Fertilizer (Mixing Only) Manufacturing
325320	Pesticide and Other Agricultural Chemical Manufacturing
325411	Medicinal and botanical manufacturing
325412	Pharmaceutical preparation manufacturing
325413	In-Vitro Diagnostic Substance Manufacturing
325414	Biological Product (except Diagnostic) Manufacturing
325510	Paint and Coating Manufacturing
325520	Adhesive manufacturing
325611	Soap and other detergent manufacturing
325612	Polish and other sanitation good manufacturing
325613	Surface active agent manufacturing
325620	Toilet Preparation Manufacturing
325910	Printing Ink Manufacturing
325920	Explosives Manufacturing
325991	Custom compounding of purchased resins
325992	Photographic film, paper, plate, and chemical manufacturing
325998	All other miscellaneous chemical product and preparation manufacturing
424690	Other Chemical and Allied Products Merchant Wholesalers
424710	Petroleum Bulk Stations and Terminals
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)

Source: NAICS 2017, EPA, 2007 and 2008

### 2.1.2 Small Business Definitions

To identify small businesses that may be impacted by the final rule, EPA used the 2012 U.S. Census data and the 2017 SBA small business size standards (Census, 2015; SBA, 2017). Small business standards are developed for each industry by NAICS code by comparing the industry characteristics to the “base” size standards: (1) 500 employees for manufacturing, mining, and other industries with employee based size standards (except for Wholesale Trade); (2) \$7.5 million<sup>5</sup> in average annual receipts for most nonmanufacturing industries with receipts based size standards (except for agricultural industries which is statutorily set at \$0.75 million); and (3) 100 employees for all Wholesale Trade industries. Significant differences between the characteristics of an industry and the average industry characteristics with the “base” size standards will support the small business standard for that industry higher or lower than the “base” size standards depending on the differences in the industry characteristics. When analyzing industry characteristics, SBA considers average firm size, start-up costs and barriers to entry, industry competition, and distribution of firms by size. Each industry characteristic is quantified and assigned a specific size standard value based on prescribed formulas. Besides industry characteristics, SBA also evaluates small business performance in Federal marketplace as an additional factor. The final size standard for an industry is obtained by averaging size standards supported by each industry factor and the Federal market factor.

The SBA size standards are industry-specific mostly based on either average annual revenue or number of employees. In order for an entity to be classified as a small business for federal contracting and other small business programs, its enterprise level revenue or number of employees (including all affiliates) shall not exceed the size standard for the applicable industry. These size thresholds are determined for 6-digit NAICS codes. All 33 NAICS codes affected by this final rule have employment-based thresholds, ranging from 150 to 1,500 employees (SBA, 2017). EPA relied on 2012 U.S. Economic Census data for employment information (Census, 2015). Table 2-2 presents the SBA size standards for the 33 NAICS industries likely to be affected by this rule.

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<sup>5</sup> In 2014, the original \$7.0 million “base” standard definition was adjusted to \$7.5 million to account for inflation.

**Table 2-2: SBA Small Business Standards for Affected Industries**

NAICS Code	NAICS Description	Employee Threshold
324110	Petroleum refineries	1,500 or fewer <sup>a</sup>
325110	Petrochemical manufacturing	1,000 or fewer
325120	Industrial gas manufacturing	1,000 or fewer
325130	Synthetic organic dye and pigment manufacturing	1,000 or fewer
325180	All other basic inorganic chemical manufacturing	1,000 or fewer
325193	Ethyl Alcohol Manufacturing	1,000 or fewer
325194	Cyclic crude and intermediate manufacturing	1,250 or fewer
325199	All other basic organic chemical manufacturing	1,250 or fewer
325211	Plastics material and resin manufacturing	1,250 or fewer
325212	Synthetic Rubber Manufacturing	1,000 or fewer
325220	Artificial and Synthetic Fibers and Filaments Manufacturing	1,000 or fewer
325311	Nitrogenous Fertilizer Manufacturing	1,000 or fewer
325312	Phosphatic Fertilizer Manufacturing	750 or fewer
325314	Fertilizer (Mixing Only) Manufacturing	500 or fewer
325320	Pesticide and Other Agricultural Chemical Manufacturing	1,000 or fewer
325411	Medicinal and botanical manufacturing	1,000 or fewer
325412	Pharmaceutical preparation manufacturing	1,250 or fewer
325413	In-Vitro Diagnostic Substance Manufacturing	1,250 or fewer
325414	Biological Product (except Diagnostic) Manufacturing	1,250 or fewer
325510	Paint and Coating Manufacturing	1,000 or fewer
325520	Adhesive manufacturing	500 or fewer
325611	Soap and other detergent manufacturing	1,000 or fewer
325612	Polish and other sanitation good manufacturing	750 or fewer
325613	Surface active agent manufacturing	750 or fewer
325620	Toilet Preparation Manufacturing	1,250 or fewer
325910	Printing Ink Manufacturing	500 or fewer
325920	Explosives Manufacturing	750 or fewer
325991	Custom compounding of purchased resins	500 or fewer
325992	Photographic film, paper, plate, and chemical manufacturing	1,500 or fewer
325998	All other miscellaneous chemical product and preparation manufacturing	500 or fewer
424690	Other Chemical and Allied Products Merchant Wholesalers	150 or fewer
424710	Petroleum Bulk Stations and Terminals	200 or fewer
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	200 or fewer

Note:  
<sup>a</sup> To qualify as small for purposes of Government procurement, the petroleum refiner, including its affiliates, must be a concern that has either no more than 1,500 employees or no more than 200,000 barrels per calendar day total Operable Atmospheric Crude Oil Distillation capacity. Capacity includes all domestic and foreign affiliates, all owned or leased facilities, and all facilities under a processing agreement or an arrangement such as an exchange agreement or a throughput. To qualify under the capacity size standard, the firm, together with its affiliates, must be primarily engaged in refining crude petroleum into refined petroleum products. A firm's "primary industry" is determined in accordance with 13 CFR § 121.107.

Source: SBA 2017, EPA, 2007 and 2008

### 2.1.3 Small Business Definitions: For Fees

The final rule prescribes a reduced fee for eligible small businesses submitting under TSCA section 5, as well as for eligible small businesses subject to a TSCA section 4 or TSCA section 6 action. An

eligible small business concern for TSCA sections 4, 5, and 6 purposes means a manufacturer or processor who meets the size standards identified in Table 2-2. The number of employees indicates the maximum allowed for a manufacturer or processor to be considered small. If the North American Industry Classification System (NAICS) code of a manufacturer or processor is not represented in Table 2-2, it will be considered small if it has 500 or fewer employees. When calculating the number of employees, the affected small business concern must include the employees of all companies they “own or control,” as defined by 40 CFR 704.3. The number of employees are calculated as the average number of people employed for each pay period of the business’ latest 12 calendar months, regardless of the number of hours worked or temporary status. To estimate annual revenue for affected parent companies, EPA used firm-level 2012 U.S. Census Statistics of the U.S. Business (SUSB) data to obtain reported revenue figures for parent entities in the affected universe.<sup>6</sup> The U.S. Census reports total receipts<sup>7</sup> for standard revenue categories for each NAICS code (NAICS code/revenue size combinations), where available. EPA divided the average of total receipts reported for each NAICS code/revenue size combinations by the total number of firms in that category to estimate the average revenue for firms in each NAICS code/revenue size combination.

In a couple of instances, Census receipt data were not reported. The Census does not report annual receipts for some NAICS code/revenue size combinations in order to avoid disclosing individual firm information. Therefore, it was not possible to include these firms in this analysis using this data. Additionally, SUSB data do not report the total receipts for NAICS code/revenue size combinations that are comprised of too few enterprises in order to avoid disclosing financial information that may be readily disaggregated to the individual firm level. In many cases, where possible, EPA uses the average percent difference of the adjacent revenue size classes to estimate the value of the unreported total revenue.

## 2.2 Chemical Manufacturers

As shown in Table 2-3, 13,309 establishments reported Chemical Manufacturing as their primary NAICS code in the 2012 Census. These 13,309 establishments belong to a total of 10,451 firms and employ a total of 727,993 employees (Census, 2015). To present a general characterization of the structure of this industry, about 91% of chemical manufacturing firms are identified as small businesses based on the SBA employee-based definitions for the applicable NAICS codes.

Table 2-3: Total Number of Parent Companies, Firms, and Employees in the Chemical Manufacturing Industry							
Industry (NAICS Code)	Firm Size	Firms		Establishments		Employees	
		Total	Percent	Total	Percent	Total	Percent
Chemical Manufacturing (325)	Large	876	8%	2,785	21%	461,858	63%
	Small	9,575	91%	10,524	79%	266,135	37%
	<b>Total</b>	<b>10,451</b>	<b>100%</b>	<b>13,309</b>	<b>100%</b>	<b>727,993</b>	<b>100%</b>

Source: Census, 2015; SBA, 2017

<sup>6</sup> The Census definition of “firm” corresponds to the definition of “parent” company used in this analysis. This database reports the total annual sales for specific firm size categories, and the 2012 data are used.

<sup>7</sup> The Census defines receipts as revenue for goods produced distributed or services provided (U.S. Census Bureau, 2016).

## 2.3 Petroleum Refineries

Table 2-4 presents the number of parent companies, establishments, and employees in the petroleum refinery industry (NAICS code 324110). This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. This industry sector is the primary resource for many petrochemical products and feedstock. A total of 68 parent companies, 152 establishments, and 59,388 employees are reported for the petroleum refineries industry sector, according to the 2012 U.S. Census data (Census, 2015). About 56% of petroleum refineries are classified as small businesses based on the SBA definition for petroleum refiners: firms with less than 1,500 employees.<sup>8</sup>

Table 2-4: Total Number of Firms and Employees in Petroleum Refineries Industries							
Industry (NAICS Code)	Firm Size	Firms		Establishments		Employees	
		Total	Percent	Total	Percent	Total	Percent
324110	Large	30	44%	109	72%	57,605	97%
	Small	38	56%	43	28%	1,783	3%
	<b>Total</b>	<b>68</b>	<b>100%</b>	<b>152</b>	<b>100%</b>	<b>59,388</b>	<b>100%</b>

Source: Census, 2015; SBA, 2017

## 2.4 Chemical and Petroleum Merchant Wholesalers

As shown in Table 2-5, 16,667 establishments reported chemical or petroleum merchant wholesaler as their primary industry (NAICS codes 424690, 424710, and 424720) in the 2012 Census. The Other Chemical and Allied Products Merchant Wholesalers industry (NAICS code 424690) comprises establishments primarily engaged in the merchant wholesale distribution of chemicals and allied products (except agricultural and medicinal chemicals, paints and varnishes, fireworks, and plastics materials and basic forms and shapes). Firms reporting NAICS codes 424710 and 424720 include establishments with bulk liquid storage facilities, primarily engaged in the merchant wholesale distribution of crude petroleum, petroleum, and petroleum products, including liquefied petroleum. The 16,667 establishments within these three industries belong to a total of 11,145 firms and employ a total of 221,170 employees (Census, 2015). About 94% of firms in those industries are classified as small businesses with less than 100 employees (for NAICS code 424690) and less than 200 employees (for NAICS codes 424710 and 424720).

<sup>8</sup> For the presentation in Table 2-4, we are unable to include the number petroleum refineries with more than 1,500 employees, but no more than 200,000 barrels per calendar day total Operable Atmospheric Crude Oil Distillation capacity in the count of small businesses, as the U.S. Census does not identify individual companies to allow for such an analysis.

**Table 2-5: Total Number of Firms and Employees in the Chemical and Petroleum Merchant Wholesaler Industries**

Industry (NAICS Code)	Firm Size	Firms		Establishments		Employees	
		Total	Percent	Total	Percent	Total	Percent
424690, 424710, 424720	Large	675	6%	4,954	30%	108,059	49%
	Small	10,470	94%	11,723	70%	113,111	51%
	<b>Total</b>	<b>11,145</b>	<b>100%</b>	<b>16,677</b>	<b>100%</b>	<b>221,170</b>	<b>100%</b>

Source: Census, 2015; SBA, 2017

## 3. TSCA Fees

### 3.1 Overview

The Frank R. Lautenberg Chemical Safety for the 21st Century Act provides the EPA authority to establish fees to defray a portion of the costs associated with administering TSCA sections 4, 5 and 6, as well as the costs of collecting, processing, reviewing, and providing access to and protecting from disclosure, as appropriate, information on chemical substances under TSCA section 14. The events that trigger a fee payment however, involve a narrower set of activities under TSCA sections 4, 5 and 6. While the collection of fees is tied to the submission of particular information under sections 4 and 5 or the manufacturing or processing of a particular chemical substance undergoing a risk evaluation under section 6, in general, the use of these fees is not limited to defraying the cost of the action that was the basis for payment of the fee.

The Agency's final fee methodology is intended to fully recover the amount specified in the statute. The estimated annual Agency costs of carrying out TSCA section 4, 5, 6 and the costs of collecting, processing, reviewing, and providing access to and protecting from disclosure, as appropriate, information on chemical substances under TSCA section 14, without including the costs associated with manufacturer-requested chemical risk evaluations, total \$80,178,000. Because 25% of this amount is less than 25 million, the Agency is finalizing a fee structure intended to collect this lesser amount. The EPA anticipates collecting about \$19.9 million in fees each year. In addition, the Agency intends to collect fees from manufacturers to recover a portion of costs incurred by the EPA in conducting chemical risk evaluations requested by manufacturers. The EPA expects this amount will be \$1.3 million for chemicals on the Work Plan and \$3.88 million for chemicals not on the Work Plan.<sup>9</sup> The *Technical Background Document for TSCA Fees (RIN 2070-AK27; EPA-HQ-OPPT-2016-0401-0020)* discusses EPA's methodology for estimating Agency costs to administer TSCA sections, 4, 5, 6, and the costs of collecting, processing, reviewing, and providing access to and protecting from disclosure, as appropriate, information on chemical substances under TSCA section 14.

The EPA *Guidelines for Preparing Economic Analyses* (2010) advises that the correct measure of cost to use for conducting regulatory benefit-cost analyses is social cost. The document states the following:

*“Social cost represents the total burden that a regulation will impose on the economy. It is defined as the sum of all opportunity costs incurred as a result of a regulation where an opportunity cost is the value lost to society of any goods and services that will not be produced and consumed as a result of a regulation.” (USEPA, 2010)*

For this rulemaking, affected manufacturers (including importers) and processors of chemical substances would be required to pay a specified fee to be established for actions regulated under TSCA. The fees to be paid by affected firms would defray the cost for EPA to administer TSCA sections 4, 5, 6, and the costs of collecting, processing, reviewing, and providing access to and protecting from disclosure, as appropriate, information on chemical substances under TSCA section

<sup>9</sup> The fees shown in this economic analysis for manufacturer-requested Risk Evaluations are not set fees like the EPA-initiated RE fees, but rather are estimated as being the same as the fees for EPA-initiated REs for analytical purposes only. The actual fees charged for manufacturer requested Risk Evaluations will be determined on a case-by-case basis, based on actual costs to the Agency.

14. Absent this regulation, the EPA costs to administer these sections of TSCA would be borne by taxpayers through budget appropriations from general revenue.<sup>10</sup> As a result of this rule, 25% of the EPA costs to administer the TSCA section 4, 5, 6, and the costs of collecting, processing, reviewing, and providing access to and protecting from disclosure, as appropriate, information on chemical substances under TSCA section 14 paid from general revenue would be transferred via the fees to the appropriate firms. The subsequent sections in this chapter present the costs that would have been borne by taxpayers that are now transferred to firms through this rule in addition to opportunity costs to be incurred by those firms. Although these fees may be perceived as direct private costs by industry, from an economic perspective, they are transfer payments rather than real social costs.

The economic burden imposed by the rule, on the other hand, include the new opportunity costs incurred as a result of this final regulation, such as the cost for affected firms to:

- read and familiarize themselves with the rule;
- determine their eligibility for paying reduced fees;
- register for CDX;
- form, manage and notify EPA of participation in consortia;
- notify EPA and certify whether they will be subject to the action or not; and
- arrange to submit fee payments via Pay.gov.

The social costs imposed by the final rule also include the additional EPA costs to administer these sections of TSCA as mandated by Congress through the Toxic Substances Control Act as amended by the Lautenberg Act.

Section 3.2 describes the methodology used to estimate the cost of the final rule. Section 3.3 presents the baseline costs, which are the costs that are currently incurred by industry. In Sections 3.4, Subsection 3.4.1 presents the fee structure for the final rule. Subsection 3.4.2 presents the total cost of the potential rule to industry and to small businesses for the final rule. Subsection 3.4.3 presents the incremental cost for industry and for small businesses for the final rule.

### **3.1.1 TSCA section 4 Program**

Under TSCA section 4, there are three types of actions for which EPA will require the payment of fees:

- (1) Test Orders
- (2) Test Rules
- (3) Enforceable Consent Agreements (ECAs)

### **3.1.2 TSCA section 5 Program**

Under TSCA section 5, EPA proposes two fee categories that include the following actions:

- (1) Pre-manufacture Notice (PMNs) (including intermediates and consolidated cases), Microbial Commercial Activity Notice (MCAN) (including consolidated cases), and Significant New Use Notice (SNUN)

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<sup>10</sup> Although there are currently fees established for TSCA section 5 actions, these fees were not established to defray the EPA costs to administer the program.

- (2) Test Market Exemption Applications (TMEAs), TSCA Environmental Release Applications (TERAs), Low Volume Exemptions (LVEs), Low Release and Low Exposure Exemptions (LoREXs), Tier II, and Film Article exemptions

EPA is eliminating the reduced fee for intermediate PMN submissions. EPA currently charges a reduced fee of \$1,000 for the submission of PMN for each chemical intermediate in a synthetic pathway when accompanied by a PMN for the final substance on that pathway, and a full fee for the final substance. The original intent of this reduced fee was to encourage manufacturers to submit these notices together, but EPA has not realized advantages in time savings by reviewing these notices together.

However, EPA will continue allowing consolidation of PMNs and MCANs, which benefits submitters by reducing the administrative burden of developing multiple TSCA section 5 submission forms for manufacture of two or more structurally related new chemical substances that have similar use, exposure, environmental release, and test data. EPA's review process is also facilitated by reviewing similar substances simultaneously.

The cost of administering Notices of Commencement (NOCs) are incorporated in the fee for PMNs, MCANs, and SNUNs and thus not included as a separate fee category for those actions.

EPA is also allowing for graduates of the Sustainable Futures program to waive their TME fees. The Sustainable Futures program provides and trains chemical developers to use EPA risk-screening models to evaluate new chemicals before they enter the market. Upon completion of the program, future submissions to EPA prior to manufacturing a new chemical will be treated as both a PMN and TME, thus only requiring a single fee. In fiscal year 2016, 13 Sustainable Futures graduates accounted for 7.6% of the valid PMNs, 37.5% of MCANs and 0% of SNUNs submitted to the Agency.

### **3.1.3 TSCA section 6 Program**

Risk evaluations are the only action under TSCA section 6 that will be assessed a fee. These fees will be used to defray costs to EPA for conducting other TSCA section 6 actions, including costs of prioritization, risk evaluation, and risk management activities. There are two main types of risk evaluations: those initiated by EPA and those requested by manufacturers. For manufacturer-requested risk evaluations, two categories of fees may be collected: for Work Plan chemicals (i.e., those included on the *TSCA Work Plan for Chemical Assessments: 2014 Update*) and for chemicals not on the Work Plan. Fees from manufacturer-requested risk evaluations are not subject to the cap of 25% of total agency costs.

### **3.1.4 TSCA Section 14**

The costs of collecting, processing, reviewing, and providing access to and protecting information about chemical substances from disclosure as appropriate under TSCA section 14, which covers CBI, have been incorporated into the overall estimate of defrayable costs. No fees will be charged specifically for these actions associated with TSCA section 14 actions, thus, TSCA section 14 actions are not represented as an individual category in this analysis.

## **3.2 Method for Estimating Fee Collection**

Total fees to be collected from manufacturers (including importers) and processors (from this point forward referred to as 'total fees' in this document) for this rule are calculated by determining (1) the number of actions per fee category and multiplying by (2) the fee amount for the category.

For the baseline, EPA used the average number of actions per year from 2013 to 2016 for each TSCA section 5 action as the estimate of the number of annual actions per fee category for the next three years. TSCA section 4 Test Orders are new under TSCA and EPA estimated the average number of such actions expected per year based on prior experience with developing Test Rules and ECAs, reviewing study plans, compliance with study plans, and the data received. EPA estimates that, on average, it will undertake work associated with ten Test Orders, one Test Rule, and one ECA each year. For TSCA section 6, the amended TSCA requirements specify the number of risk evaluations EPA must have ongoing over the next three years. Under the recent amendments to TSCA, EPA assumes that TSCA section 4 actions (Test Rules and ECAs) would change from the baseline; PMN, SNUN, and MCAN actions would decrease as a result of higher fees and the new statutory requirement for affirmative determination; and TSCA section 6 actions initiated would increase in accordance with statutory requirements.

### **3.2.1 Estimates of Number of Actions**

EPA estimates the total fees of this rule by multiplying the final fees with the number of expected actions under full implementation for each section of TSCA. For TSCA section 4, Test Orders are a new action stemming from the amendments to TSCA. For Test Rules and ECAs, EPA has not promulgated any Test Rules or entered into any Enforceable Consent Agreements in the recent past and therefore has estimated the number of actions that will be achievable. A discussion of the basis and details for these estimates is presented in the *Technical Background Document for TSCA Fees (RIN 2070-AK27; EPA-HQ-OPPT-2016-0401-0020)*. However, EPA used data from the most recent High Production Volume (HPV) TSCA section 4 actions to develop assumptions for estimates of the proportion of small firms impacted per action.

EPA based the estimates of future number of TSCA section 5 actions on the historical number of actions for all TSCA section 5 notices and exemptions. EPA further assumes that the number of PMNs, SNUNs, and MCANs will decline by approximately 20% each as a result of higher fees. Companies that graduate from Sustainable Futures become eligible to have the TME fee waived; however, the Agency is uncertain about the future number of submission from Sustainable Futures graduates. Based on historical submissions from Sustainable Future graduates, EPA estimates that 52 TME fees will be exempted, reducing total fee collection by \$244,400.

TSCA section 6 risk evaluations are a new action under the amended TSCA. In the past, EPA developed risk assessments. This risk assessment process has been replaced by risk evaluations, where EPA is now required to evaluate existing chemicals to determine whether they “present an unreasonable risk of injury to health or the environment.” EPA uses data from the 2012 TSCA Chemical Data Reporting for the first ten chemicals identified for risk evaluations to estimate the expected average number of affected firms per chemical and number of affected small businesses. For manufacturer-requested risk evaluations, EPA estimated the number of TSCA section 6 actions for Work Plan and non-Work Plan chemicals based on a historical average of 2014 and 2015 TSCA section 6 actions (EPA 2017).

### **3.2.2 Estimates of Program Costs**

EPA determined both direct program costs and indirect costs associated with TSCA sections 4, 5, 6, and the costs of collecting, processing, reviewing, and providing access to and protecting from disclosure, as appropriate, information on chemical substances under TSCA section 14 actions. EPA estimated TSCA section 4 submission costs based on prior experience with developing Test Rules and ECAs, reviewing study plans, and the data received. It is assumed that each TSCA section 4

action will cover one to five chemicals, and that, on average, data will be submitted to EPA for seven tests on each chemical. The estimated cost to EPA of each Test Order is approximately \$279,000. Each Test Rule is estimated to cost approximately \$844,000, and each ECA is estimated to cost approximately \$652,000.

Estimated TSCA section 5 program costs include the costs of processing, reviewing, and making affirmative determinations, and EPA's costs of taking any regulatory action needed to address unreasonable risk such as with a significant new use rule (SNUR) or a test order. Costs also include estimates for administering TSCA section 5, such as those associated with processing, retaining records, and managing CBI, and reviewing the substantiation for any CBI data contained in an NOC submission. EPA estimated costs based on annual historical costs data starting from 1987. The provisions of TSCA, as amended, result in additional TSCA section 5 Agency costs that arise primarily from the requirement to evaluate intended, known, or reasonably foreseen conditions of use, and the requirement to make an affirmative risk determination, and from development of SNURs and orders that result from analysis and findings under TSCA, as amended. Therefore, EPA used cost estimates from prior experience as a starting point and added estimates for the costs of these additional responsibilities. The average cost of a PMN, MCAN, and SNUN is approximately \$55,200. Costs associated with TSCA section 5 exemption notices and applications include processing and reviewing the application, retaining records, managing any CBI, and reviewing the substantiation for any CBI data contained in the submission. The average cost of an exemption is \$5,600.

TSCA section 6 costs are informed by EPA's experience completing chemical assessments for several TSCA Work Plan Chemicals and by EPA's experience addressing risks identified from particular uses of a chemical. TSCA section 6 risk evaluation costs include the cost of identifying candidate chemicals for prioritization, prioritization, information gathering, considering human and environmental hazard, environmental fate, and engineering and exposure assessments. Costs also include the use of the ECOTOX knowledge and Health and Environmental Research Online (HERO) databases, among others. Other costs include scoping (including problem formulation, conceptual model and analysis plan), developing and publishing the draft evaluation, conducting and responding to peer review and public comment, and developing the final evaluation, which includes a risk determination. The costs associated with an average chemical risk evaluation is estimated to be approximately \$3,884,446. Cost estimates for risk management activities have been informed, in part, by the EPA's proposed recent risk reduction actions on several chemicals, including the use of methylene chloride and N-methylpyrrolidone in paint and coatings removal and trichloroethylene in both commercial vapor degreasing and aerosol degreasing and for spot cleaning in dry cleaning facilities.

Three-year discounted total costs are shown to represent the total cost transferred from the taxpayer to industry in the final rule over the three-year period, as EPA is mandated to review and revise fees at the end of three years.

### **3.3 Baseline Fee Collection**

Before the 2016 amendment to TSCA, EPA was authorized to collect fees for only select TSCA section 5 and TSCA section 4 actions. However, EPA only ever collected fees for certain TSCA section 5 actions. As mentioned in Section 1.2 of this document, under TSCA section 6, there were formerly no fee requirements for firms. Baseline costs for this final rule are based on the fees that EPA actually collected under TSCA before the 2016 amendment. Baseline costs do not include fees

that EPA was authorized to collect but never implemented. In cases in the baseline where EPA does not collect a fee, its programs are funded by taxpayers through Congressional appropriations.

The fees for the various TSCA section 5 actions before the 2016 amendment were limited to not be greater than the following amounts:

- (i) PMNs and consolidated PMNs: \$2,500
- (ii) Intermediate PMNs: \$1,000
- (iii) MCANs and consolidated MCANs: \$2,500
- (iv) SNUNs: \$2,500.
- (v) Exemption applications: \$2,500
- (vi) Exemption notices: \$2,500

EPA does not currently collect fees for exemptions. As a result, EPA has not included the fees for exemptions in the baseline cost estimates for this analysis.

### **3.3.1 Baseline Fee Collection for Small Businesses**

Firms determined to be small businesses based on EPA's 1988 definition of \$40 million in revenues were charged fees capped by statute at \$100 for any of the categories of actions under TSCA section 5.<sup>11</sup> For the purposes of collecting fees under TSCA section 5, EPA defined small businesses eligible to pay a reduced fee as firms with average annual sales less than \$40 million. This means that it was likely for some firms designated as small businesses by SBA standards not to be considered eligible small businesses to pay the reduced fee by the EPA definition and, therefore, be required to pay the general fee for submissions under TSCA section 5. EPA estimated the number of small businesses that currently pay the general fee using the relationship between the number of firms in the affected NAICS codes that are small businesses by the EPA and SBA definitions. Using this methodology, EPA estimates that 14 small businesses currently pay the general fee for PMN/SNUN/MCAN actions. Using historical averages of TSCA actions, total baseline fee payments for all sections are shown in Table 3-1. Under TSCA section 5, total baseline annualized fee payments are estimated at \$1,206,200, with small businesses comprising 0.76 percent of the total collection.

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<sup>11</sup> See 40 CFR 700.45(b)(1)

<b>Table 3-1: Total Baseline Fee Collection</b>								
<b>Final Fee Category</b>	<b>Total Estimated Actions</b>	<b>Estimated General Fee Actions (A)</b>	<b>General Industry Fee per Action (B)</b>	<b>Estimated Annual Fee Recovery (C= A x B)</b>	<b>Small Business Estimated Actions (D)</b>	<b>Small Business Fee per Action (E)</b>	<b>Small Business Estimated Annual Fee Recovery (F = D x E)</b>	<b>Total General Industry &amp; Small Business Cost (C + F)</b>
<b>TSCA section 5</b>								
PMN/MCAN/SNUN	565	474	\$2,500	\$1,185,000	91	\$100	\$9,100	\$1,194,100
Intermediate PMN	13	12	\$1,000	\$12,000	1	\$100	\$100	\$12,100
TME/TERA/LVE/LoREX/Tier II	560	470	\$0	\$0	90	\$0	\$0	\$0
5(h)(2) Exemption <sup>a</sup>	0	0	\$2,500	\$0	0	\$100	\$0	\$0
Film Article <sup>a</sup>	0	0	\$2,500	\$0	0	\$100	\$0	\$0
<b>TOTAL</b>	<b>1,138</b>	<b>956</b>		<b>\$1,197,000</b>	<b>182</b>		<b>\$9,200</b>	<b>\$1,206,200</b>
<b>Note:</b>								
<sup>a</sup> EPA has historically not collected any fees associated with these exemptions.								

### 3.4 Fee Structure under the Final Rule

This section describes the fee structure for the final rule presented. Subsection 3.4.1 presents the final fee structure, Subsection 3.4.2 presents the total from industry and small businesses, and Subsection 3.4.3 presents the incremental fees collected from industry and small businesses.

#### 3.4.1 Fee Structure

Table 3-2 shows the fee structure under the final rule and Table 3-3 presents the proposed fees for manufacturer-requested risk evaluations. Fees for manufacturer-requested risk evaluations will be based on actual costs and, so the “fees” for manufacturer-requested REs that are shown in this analysis are meant to be an estimated fee based on the estimated Agency costs for manufacturer-requested REs (which are estimated to be the same as the Agency cost for EPA-initiated risk evaluations - \$3.88 million). The fees shown in this economic analysis for manufacturer-requested risk evaluations are not set fees like the EPA-initiated RE fees, but rather are estimated as being the same as the fees for EPA-initiated REs for analytical purposes only. The actual fees charged for manufacturer requested risk evaluations will be determined on a case-by-case basis, based on actual costs to the Agency. A more detailed explanation of the methodology EPA used to derive the user fees to defray the costs to administer TSCA sections 4, 5, 6, and the costs of collecting, processing, reviewing, and providing access to and protecting from disclosure, as appropriate, information on chemical substances under TSCA section 14 are included in the *Technical Background Document for TSCA Fees (RIN 2070-AK27; EPA-HQ-OPPT-2016-0401-0020)*.

Table 3-2: Fee Structure			
Final Fee Category	Total Annual Estimated Actions	Final Fee	Final Small Business Fee <sup>b</sup>
<b>TSCA section 4</b>			
Test Order	10	\$9,800	\$1,960
Test Rule	1 every other year	\$29,500	\$5,900
Enforceable Consent Agreement (ECA)	1 every other year	\$22,800	\$4,560
<b>TSCA section 5 <sup>c</sup></b>			
PMN/MCAN/SNUN	452	\$16,000	\$2,800
Intermediate PMN	10	\$16,000	\$2,800
Exemption <sup>a</sup>	560	\$4,700	\$940
<b>TSCA section 6</b>			
EPA-Initiated Risk Evaluation	25 ongoing over 3 years	\$1,350,000	\$270,000
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), and certain new microorganism (Tier II) exemptions. <sup>b</sup> Small business fees presented here for section 4 and section 6 actions are the maximum amount that will be collected per firm if the only affected firm(s) for an action is a small business concern. EPA does not expect small businesses to exercise Section 4 and 6 actions alone which is why no small business fee collections are presented in Table 3-4 for Section 4 and 6 actions. For section 5, since EPA expects one affected firm per action, the final rule fee will be collected for each affected small business concern. <sup>c</sup> EPA based the estimates of future number of TSCA section 5 actions on the historical number of actions for all TSCA section 5 notices and exemptions. EPA further assumes that the number of PMNs, SNUNs, MCAN, and intermediate PMNs will decline by approximately 20% each as a result of higher fees.			

From this point forward, intermediate PMNs will be included with PMNs/SNUNs/MCANs in this economic analysis.

<b>Table 3-3: Fee Structure for Manufacturer-Requested Risk Evaluation</b>		
<b>Action <sup>a, b</sup></b>	<b>Total Estimated Actions/year</b>	<b>Risk Evaluation Fee</b>
2014 Work Plan Chemical	2 every 3 years	\$1,942,000
Non-Work Plan Chemical	1	\$3,884,000
<b>Note:</b>		
<sup>a</sup> The fees shown in this economic analysis for manufacturer-requested risk evaluations are not set fees like the EPA-initiated RE fees, but rather are estimated as being the same as the fees for EPA-initiated REs for analytical purposes only. The actual fees charged for manufacturer requested risk evaluations will be determined on a case-by-case basis, based on actual costs to the Agency. <sup>b</sup> There are no reduced fees for small business concerns that submit manufacturer-requested risk evaluations.		

### 3.4.2 Total Fee Collection

Total initial annual fees collected under the final rule total \$19,898,060, as shown in Table 3-4. TSCA section 4 fees account for <1 percent of the total fees collected, TSCA section 5 fees account for 43 percent, and TSCA section 6 fees account for 57 percent. In Table 3-5, three-year annualized fees collected are discounted by 3 and 7 percent.

From the 2016 section 5 submissions, EPA estimates that 16% of TSCA section 5 actions were from firms that paid reduced fees (i.e., firms with less than \$40 million in annual sales). This estimate of small business concerns does not include SBA-defined small businesses that were not eligible for reduced fees, but will be eligible for reduced fees under this rule. EPA does not collect information on the number of SBA-defined small businesses that were not eligible to pay reduced fees, so EPA estimated this number using an escalation factor from the small businesses in the identified NAICS codes.

$$\begin{aligned}
 \text{Escalation factor} &= 1 + (\text{Total number of SBA-defined small business concerns} - \text{number of} \\
 &\quad \text{firms with less than \$40 million in revenue}) / \text{number of firms with less} \\
 &\quad \text{than \$40 million in revenue} \\
 &= 1 + (20,083 - 17,288) / 17,288 \\
 &= 1 + 2,795 / 17,288 \\
 &= 1.16
 \end{aligned}$$

Using this escalation factor, EPA estimates that 18.56% (0.16 x 1.16) of section 5 submissions were from SBA-defined small businesses. As a result, EPA estimates that 86 (18.56% x 462) small businesses will submit a PMN/SNUN/MCAN (including intermediate PMN) and 104 (18.56% x 560) small businesses will submit exemptions each year.

**Table 3-4: Total Initial Annual Fee Collection**

Final Fee Category	Total Estimated Actions	Estimated General Fee Actions (A)	General Industry Fee per Action (B)	Estimated Annual Fee Recovery (C= A x B)	Small Business Estimated Actions (D)	Small Business Fee per Actions (E)	Small Business Actions Estimated Annual Fee Recovery (F = D x E)	Total General Industry & Small Business Fee Collection (C + F)
<b>TSCA section 4</b>								
Test Order	10	10	\$9,800	\$98,000				\$98,000
Test Rule <sup>a</sup>	1 every other year	1 every other year	\$29,500	\$29,500				\$29,500
Enforceable Consent Agreement (ECA) <sup>a</sup>	1 every other year	1 every other year	\$22,800	\$22,800				\$22,800
<b>TSCA section 5</b>								
PMNs/MCAN/SNUN <sup>b</sup>	462	376	\$16,000	\$6,016,000	86	\$2,800	\$240,800	\$6,256,800
Exemption <sup>c</sup>	560	456	\$4,700	\$2,143,200	104	\$940	\$97,760	\$2,240,960
<b>TSCA section 6</b>								
EPA-Initiated Risk Evaluation	8 <sup>d</sup>	8 <sup>d</sup>	\$1,350,000	\$11,250,000				\$11,250,000
<b>TOTAL</b>				\$19,559,500			\$338,560	\$19,898,060
<sup>a</sup> Test Rules and ECAs are estimated to have one new action every 2 years. Thus annualized costs are calculated accounting for the timing of the fee collected over a three-year period. <sup>b</sup> Includes intermediate PMNs. <sup>c</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles. <sup>d</sup> Amount is rounded								

<b>Table 3-5: Annualized Total Fee Collection</b>			
<b>Final Fee Category</b>	<b>Total Initial Annual Fee Collection</b>	<b>3-Year Annualized Fee Collection with 3% Discount</b>	<b>3-Year Annualized Fee Collection with 7% Discount</b>
<b>TSCA section 4</b>			
Test Order	\$98,000	\$98,000	\$98,000
Test Rule	\$29,500	\$19,670	\$19,682
Enforceable Consent Agreement (ECA)	\$22,800	\$15,202	\$15,212
<b>TSCA section 5</b>			
PMNs/MCAN/SNUN <sup>b</sup>	\$6,256,800	\$6,256,800	\$6,256,800
Exemption <sup>a</sup>	\$2,240,960	\$2,240,960	\$2,240,960
<b>TSCA section 6</b>			
EPA-Initiated Risk Evaluation	\$11,250,000	\$11,250,000	\$11,250,000
<b>TOTAL</b>	<b>\$19,898,060</b>	<b>\$19,880,632</b>	<b>\$19,880,653</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles. <sup>b</sup> Includes intermediate PMNs.			

### (A) Total Small Business Fee Collection

On average, based on EPA assumption and estimates of the expected number of sections 4, 5, and 6 actions, a total of 1,416 firms will be affected by the proposed rule each year. Of the firms affected by the proposed rule each year, 298 (21%) are expected to be small businesses, as defined by SBA.<sup>12</sup> The number of small businesses expected to be affected by the rule each year was estimated as:

- For TSCA section 4 actions, based on past Test Rules for High Production Volume (HPV) chemicals, EPA estimates that each action involves an average of seven chemicals, and that an average of four firms will be impacted per chemical. EPA further estimates that one of the four firms is a small business that will be eligible for reduced fees. As a result, EPA estimates that 84 small businesses ((10 Test Orders + 1 Test Rule + 1 ECA) x 7 chemicals per TSCA section 4 action x 1 small business impacted per chemical) will be involved in TSCA section 4 actions each year.
- For section 5 actions, 190 (86 + 104) submissions will be from small businesses paying reduced fees
- For section 6 actions, based on the average number of firms per the initial ten chemicals identified by EPA for risk evaluations, EPA estimates that seven firms will be affected by each TSCA section 6 action. Of these seven firms, three are expected to be small businesses. With

<sup>12</sup> Estimates of total number of firms expected to be affected by this proposed rule each year are based on the average number of affected chemicals per firm under the HPV Test Rules and the first ten Priority Chemicals for Risk Evaluation. However, this may not be the case and the number of affected firms each year could be less than indicated.

eight TSCA section 6 actions expected to be initiated each year at full implementation levels, EPA estimates that 24 small businesses will be affected by TSCA section 6 actions each year.

For TSCA sections 4 and 6, reduced fees for eligible small businesses and fees for all other affected firms may differ over the three years, since the fee paid by each firm is dependent on the number of affected firms.<sup>13</sup> The total fee collected per action has to sum to the specified fee per action. As a result, if multiple firms are subject to fees and the small business(es) eligible for a discount decide to forgo associating with a consortium, EPA will determine fees using the number and type of affected firms per action. The general fee paid by each affected firm will be related to the total number of affected firms per action (or chemical) and taking into account lower fees for SBA-defined small businesses:

$$P_s = 0.2 \times \left[ \frac{F}{M_t} \right]$$

$$P_o = \frac{F - \left[ 0.2 \times \left[ \frac{F}{M_t} \right] \times M_s \right]}{(M_t - M_s)}$$

Where:

$P_s$  = the portion of the applicable fee to be collected from a small business that qualifies for a discount.

$P_o$  = the portion of the applicable fee to be collected from each other affected business.

$F$  = the total applicable fee to be collected per action.

$M_t$  = the total number of affected firms for the chemical.

$M_s$  = the number of affected small businesses for the chemical that qualify for a discount.

However, for Test Rules and ECAs, EPA expects one action in the first and third years. Since EPA expects one small business to be eligible for a reduced fee (based on the firms affected by past HPV rules), the average fee per affected small business in the initial year of TSCA section 4 actions are estimated as followed: \$70 (\$9,800/28 firms x 20%) for Test Orders; \$211 (\$29,500/28 firms x 20%) for Test Rules; and \$163 (\$22,800/28 firms x 20%) for ECAs.

Finally, for TSCA section 6 actions the average fees per affected firm for a TSCA section 6 action are as follows: \$38,571 (0.2 x \$1,350,000/7 firms) for each of three eligible small businesses.

For each of the three years to be covered by this proposed rule, EPA estimates that total fees paid by small businesses will account for about 6% of the fees to be collected for TSCA sections 4, 5 and 6 actions. Table 3-6 presents the estimated total initial annual fees collected from small businesses for each action. Because of EPA's alternative small business definition for fees, the fees collected from

<sup>13</sup> In the event that a single firm is subject to a TSCA section 4 or TSCA section 6 action and that firm is a small business that qualifies for a discounted fee, EPA will not recover the full fee for the action, as only the discount of 80% of the total fee for each action will be collected.

small businesses differ for the small businesses that pay the general fee and those that pay the reduced fee. As a result, the estimated total first-year fee collection from small businesses is about \$1.3 million.

**Table 3-6: Initial Total Annual Fee Collection from Small Business**

Final Fee Category	Small Business Firms paying Reduced Fee (A)	Reduced Fee per Action (B) <sup>1</sup>	Small Business Estimated Annual Fee Recovery (C = A x B)
<b>TSCA section 4</b>			
Test Order	70	\$70	\$4,900
Test Rule	7	\$211	\$1,475
Enforceable Consent Agreement (ECA)	7	\$163	\$1,140
<b>TSCA section 5</b>			
PMN/MCAN/SNUN	86	\$2,800	\$240,800
Exemption	104	\$940	\$97,760
<b>TSCA section 6</b>			
EPA-Initiated Risk Evaluation	24	\$38,571	\$925,714
<b>TOTAL</b>	<b>298</b>		<b>\$1,271,789</b>

<sup>1</sup> The reduced fees per action were estimated based on the estimated number of small businesses affected per action. For Section 5, each action affects a single firm and small business fees are prescribed. For Sections 4 and 6, the fee is set per action, regardless of the number of firms subject to the fee (except in cases where there is a single affected firm and that firm is a small business); therefore, the portion of the fee paid by affected small businesses will be a function of the total number of affected firms.

Over the three-year period covered by the final rule, EPA estimates that the annualized total fee collection from affected small businesses will be about \$1.3 million. Table 3-7 presents the estimated discounted total fee collection (with 3% and 7% discount rates) from small businesses affected by the final rule.

<b>Table 3-7: Annualized Total Fee Collection from Small Business</b>			
<b>Final Fee Category</b>	<b>Initial Small Business Fee Collection</b>	<b>3-Year Annualized Fee Collection with 3% Discount</b>	<b>3-Year Annualized Fee Collection with 7% Discount</b>
<b>TSCA section 4</b>			
Test Order	\$4,900	\$4,900	\$4,900
Test Rule	\$1,475	\$983	\$984
Enforceable Consent Agreement (ECA)	\$1,140	\$760	\$761
<b>TSCA section 5</b>			
PMN/MCAN/SNUN	\$240,800	\$240,800	\$240,800
Exemption <sup>a</sup>	\$97,760	\$97,760	\$97,760
<b>TSCA section 6</b>			
EPA-Initiated Risk Evaluation	\$925,714	\$925,714	\$925,714
<b>TOTAL</b>	<b>\$1,271,789</b>	<b>\$1,270,918</b>	<b>\$1,270,919</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles.			

### 3.4.3 Incremental Fee Collection

The total annualized incremental fees collected from TSCA section 4 and 5 are estimated to be about \$133,000 and \$7.3 million, respectively, while the total incremental fees collected for TSCA section 6 actions is estimated to be \$11.3 million. The overall total annualized incremental fees collected under the final rule is \$18.7 million, with discounted values at 3 and 7 percent over a three-year time period, as shown in Table 3-8. Firm-level incremental fee collections are shown in Table 3-9.

<b>Table 3-8: Incremental Fee Collection</b>					
<b>Final Fee Category</b>	<b>Baseline Fee Collection</b>	<b>Initial Total Fee Collection</b>	<b>Initial Incremental Fee Collection</b>	<b>3-Year Annualized Incremental Fee Collection with 3% Discount</b>	<b>3-Year Annualized Incremental Fee Collection with 7% Discount</b>
<b>TSCA section 4</b>					
Test Order	\$0	\$98,000	\$98,000	\$98,000	\$98,000
Test Rule	\$0	\$29,500	\$29,500	\$19,670	\$19,682
Enforceable Consent Agreement (ECA)	\$0	\$22,800	\$22,800	\$15,202	\$15,212
<b>TSCA section 5</b>					
PMN/MCAN/SNUN	\$1,224,200	\$6,256,800	\$5,032,600	\$5,032,600	\$5,032,600
Exemption <sup>a</sup>	\$0	\$2,240,960	\$2,240,960	\$2,240,960	\$2,240,960
<b>TSCA section 6</b>					
EPA-Initiated Risk Evaluation	\$0	\$11,250,000	\$11,250,000	\$11,250,000	\$11,250,000
<b>Total</b>	<b>\$1,224,200</b>	<b>\$19,898,060</b>	<b>\$18,673,860</b>	<b>\$18,656,432</b>	<b>\$18,656,453</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles.					

<b>Table 3-9: Incremental Fee Collection per Firm</b>					
<b>Final Fee Category</b>	<b>Total Estimated Actions(A)</b>	<b>Number of Firms per Action (B)</b>	<b>Total Number of Firms per Fee Category (C = A x B)</b>	<b>Initial Incremental Fee Collection (D)</b>	<b>Initial Incremental Fee Collection Per Firm (E = D/C)<sup>14</sup></b>
<b>TSCA section 4</b>					
Test Order	10	28	280	\$98,000	\$350
Test Rule	1 every other year	28	28	\$29,500	\$1,054
Enforceable Consent Agreement (ECA)	1 every other year	28	28	\$22,800	\$814
<b>TSCA section 5</b>					
PMN/MCAN/SNUN	462	1	462	\$5,032,600	\$10,893
Exemption <sup>a</sup>	560	1	560	\$2,240,960	\$4,002
<b>TSCA section 6</b>					
EPA-Initiated Risk Evaluation	8 <sup>b</sup>	7	56	\$11,250,000	\$192,857
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles. <sup>b</sup> Amount is rounded. Numbers may not add up due to rounding.					

### (A) Incremental Fee Collection from Small Business

Table 3-10 presents the annual small business incremental fees collected and the corresponding discounted fees collected over the three-year period of analysis for this final rule.

<sup>14</sup> Estimation of the incremental fee collection per firm assumes that each firm is only affected by one action for the year and over the 3-year period for this rule. It is possible for a specific to be affected by more than one action in a year, however, upon EPA review of data on firms affected by the past three section 4 HPV rules and the ongoing section 6 action on 10 priority chemicals, EPA estimated that, on average, a firm was involved in less than two actions in a given year.

<b>Table 3-10: Small Business Incremental Fee Collection</b>					
<b>Final Fee Collection</b>	<b>Baseline Fee Collection</b>	<b>Initial Total Fee Collection</b>	<b>Initial Incremental Fee Collection</b>	<b>3-Year Discounted Incremental Fee Collection with 3% Discount</b>	<b>3-Year Discounted Incremental Fee Collection with 7% Discount</b>
<b>TSCA section 4</b>					
Test Orders	\$0	\$4,900	\$4,900	14,276	13,759
Test Rules	\$0	\$1,475	\$1,475	2,865	2,763
Enforceable Consent Agreement (ECA)	\$0	\$1,140	\$1,140	2,215	2,136
<b>TSCA section 5</b>					
PMN/MCAN/SNUN	\$9,200	\$240,800	\$231,600	\$674,760	\$650,337
Exemption <sup>a</sup>	\$0	\$97,760	\$97,760	\$284,821	\$274,512
<b>TSCA section 6</b>					
EPA-Initiated Risk Evaluations	\$0	\$925,714	\$925,714	\$2,697,041	\$2,599,423
<b>Total</b>	<b>\$9,200</b>	<b>\$1,271,789</b>	<b>\$1,262,589</b>	<b>\$3,675,977</b>	<b>\$3,542,930</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles.					

## 4. Benefits

The final rule would institute fees applicable to any person required to submit information to the EPA under the Toxic Substances Control Act (TSCA) TSCA section 4 or a notice, including an exemption or other information, to be reviewed by the Administrator under TSCA section 5, or who manufactures (including imports) a chemical substance that is the subject of a risk evaluation under TSCA section 6(b). These fees will be deposited in the U.S. Treasury's TSCA Service Fees Fund and used to defray the costs of administering TSCA sections 4, 5, 6, and the costs of collecting, processing, reviewing, and providing access to and protecting from disclosure, as appropriate, information on chemical substances under TSCA section 14. Thus, the main benefit of this final rule is to provide EPA with a sustainable source of funding. This chapter describes the benefits of the final rule.

### 4.1 Funding for Program Implementation

In developing the Lautenberg Act, Senator Udall noted the importance of providing EPA with a “sustained source of funding for implementation.” (161 Cong. Rec. S8872, 2015). Accordingly, the intent, and main benefit, of this final rule is to defray the costs of administering TSCA sections 4, 5, and 6, and collecting, processing, reviewing, providing access to, and protecting from disclosure as appropriate, the information collected under those programs.

As described in this Economic Analysis, EPA is authorized to design a fee program to collect 25% of the total cost for implementing regulations under TSCA sections 4, 5, 6, and the costs of collecting, processing, reviewing, and providing access to and protecting from disclosure, as appropriate, information on chemical substances under TSCA section 14. This sustained source of funding allows EPA to ensure that the appropriate amount of staff time and other resources (including contractor costs) are allocated to implementing these programs.

The benefits to society of regulations under TSCA sections 4, 5, and 6 are described in detail in the Economic Analyses associated with each of the rules promulgated for specific chemicals. They are described in general terms in the following sections.

#### 4.1.1 Benefits of Regulations under TSCA section 4

Under TSCA section 4, EPA promulgates regulations requiring the testing of chemical substances and mixtures. The testing is required to provide information on health or environmental effects when there is insufficient information for EPA risk assessors to be able to determine whether a chemical substance or mixture presents an unreasonable risk to health or the environment. The benefits of testing requirements result from the development of a basic set of hazard information on the regulated chemical substances, and the use of this information by the public, industry, and government. The information developed as a result of TSCA section 4 rules is made publicly available and yields benefits resulting from the direct use of the information. That is, publicly available information on a chemical's risks is likely to result in (a) a reduction in the costs of risk-based decisions about the chemical, and (b) an improvement in the expected outcome of the decisions.

The specific tests required under a TSCA section 4 Test Rule provide screening-level hazard and environmental fate information, used to determine whether more research is warranted to completely characterize the hazards and risks associated with the chemical. Screening-level tests that provide information on the toxicity of a chemical (e.g., aquatic toxicity, mammalian toxicity) provide

information on the health and environmental effects of the chemical, and can be used to help assess how hazardous the chemical is to the populations exposed. Results of these screening-level tests – and any further research as necessary – may help reveal the need for special containers and storage procedures, engineering controls, and personal protective equipment in the workplace to adequately control health and environmental risks associated with manufacture, processing, and/or use of the chemicals. A risk evaluation is not complete without an estimation of the level of population exposure, which is why physical/chemical properties and environmental fate and pathways information are needed. This information shows how the chemical may interact with the environment or the body, and the methods by which it may be dispersed. The information developed from these tests benefits workers, consumers, or persons living in locations impacted by chemical emissions, as government regulation and response to long-term and emergency releases can be more targeted and effective. In particular, the tests help agencies prioritize the regulation of chemical emissions based on the level of exposure.

#### **4.1.2 Benefits of Regulations under TSCA section 5**

TSCA section 5 requires that any person who proposes to manufacture (which includes import) a “new chemical” falling under the purview of TSCA (i.e., a chemical not listed on the TSCA section 8(b) Inventory) must provide a pre-manufacture notice (PMN) or an exemption application to EPA at least 90 days prior to commencing manufacture of that chemical.<sup>15</sup> Under TSCA section 5, EPA is authorized to determine that a use of a chemical substance is a significant new use and promulgate a significant new use rule (SNUR). In certain instances, persons may opt to pursue that use, in which case they must submit a notice and undergo a review. For such circumstances, TSCA section 5 requires a significant new use notice (SNUN) from any person who proposes to manufacture or process a chemical for a use that is determined by EPA to be a “significant new use.”

The benefit of PMN and SNUN submissions is that they provide EPA with the opportunity to evaluate intended, known, or reasonably foreseen conditions of use of a chemical and, if necessary, to prohibit or limit that activity before it occurs. They allow the Agency to take action as needed to address unreasonable risk to the environment or human health. The specific benefit of each action depends on the characteristics and risk associated with the regulated chemical(s) and condition(s) of use.

#### **4.1.3 Benefits of Regulations under TSCA section 6**

Under TSCA section 6, EPA must issue rulemaking to address risk and ensure chemical safety if EPA's risk evaluation finds that the manufacture, processing, distribution in commerce, use, or disposal presents an unreasonable risk of injury to health or the environment. Specifically, TSCA section 6(a) authorizes EPA to:

- Prohibit or limit manufacture, processing, or distribution in commerce;
- Prohibit or limit the manufacture, processing, or distribution in commerce of the chemical substance above a specified concentration;
- Require adequate warnings and instructions with respect to use, distribution, or disposal;

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<sup>15</sup> New polymer substances may be exempt from both PMNs and exemption applications, and also from the Chemical Substance Inventory listing.

- Require manufacturers or processors to make and retain records;
- Prohibit or regulate any manner of commercial use;
- Prohibit or regulate any manner of disposal; and/or
- Require manufacturers or processors to give notice of the unreasonable risk of injury, and to recall products if required.

The benefits of regulations under TSCA section 6 (and the risk evaluations that may precede these regulations) can be measured in terms of the illness or deaths avoided by reduction in exposure to the chemical(s). Benefit analyses for such regulations use information on chemical releases, exposure, health and ecological risk, and provide the monetized value of risk reduction, where monetized values can be estimated.

## 5. Social Cost of the Final Rule

As discussed in Chapter 3 of this analysis, the total social cost of this final rule includes the additional EPA costs to administer these sections of TSCA as mandated by Congress through the Toxic Substances Control Act as amended by the Lautenberg Act, and the opportunity costs incurred by affected chemical manufacturers (including importers) and processors, such as the cost to:

- read and familiarize themselves with the rule;
- determine their eligibility for paying reduced fees;
- register for CDX;
- form, manage and notify EPA of participation in consortia;
- notify EPA and certify whether they will be subject to the action or not; and
- arrange to submit fee payments via Pay.gov.

### 5.1 Industry Burden and Opportunity Costs

This section presents a summary of the industry burden and costs associated with the final rule for the following burden activities: rule familiarization, certification of cessation or no manufacture, small business determination, forming a consortium, informing EPA of participation in consortia, and transmittal of fee payments.

EPA estimates the firm-level burden by multiplying the estimated number of annual responses (base number of firms expected to be affected and annual number of actions) by the estimated additional time the final rule will require per response. The industry labor wage rate calculation is presented in 5.1.1. Section 5.1.2 presents the industry burden and costs for TSCA section 4 actions; Section 5.1.3 presents the burden and costs for TSCA section 5 actions; and Section 5.1.4 presents the industry burden for TSCA section 6 actions.

Chemical manufacturer burden and associated opportunity costs include the activity types listed below. Note that not all entities incur burden or opportunity costs for all of these activities. For example, EPA assumes that only a portion of affected firms with annual revenues close to the revenue-based small business threshold established by this final rule will spend time determining if they qualify for the small business discount.

- **Rule Familiarization:** EPA assumes that each firm subject to a fee will spend 0.5 hours becoming familiar with the requirements of the final rule and developing an understanding of what actions are necessary to comply with the fee payment requirements. This is estimated as a one-time burden. The burden is estimated to occur the first time a firm is affected by the final rule. For analytical purposes, EPA assumes that no firm will be subject to any of the fee-triggering actions under TSCA sections 4, 5, or 6 more than once over the three-year period of this rule. Therefore, the average burden per respondent for each of the three years of analysis is calculated as  $0.5/3 = 0.167$  hours/year.
- **Reduced Fee Eligibility Determination:** The final rule establishes reduced fees for firms classified as small businesses based on the SBA-defined small business thresholds. EPA estimates 0.5 hours of managerial burden to review the firm records and compare them with the SBA NAICS code-specific thresholds for firms eligible for a discounted fee. EPA assumes that the proportion of firms that will incur this burden is roughly equivalent to the proportion of affected firms that are small businesses, as defined by the Small Business Administration (SBA).

EPA estimates that SBA-defined small businesses account for one in four firms for TSCA section 4 actions, 18.56% of affected firms for TSCA section 5 actions, and 24 of the 60 total firms for TSCA section 6 actions. This may be an overestimate as some SBA-defined small businesses may already know their size classification. This burden is assumed to occur once for each affected firm over the three-year period of this economic analysis. Since EPA assumes that no firm will be subject to any of the TSCA section 4, 5, or 6 actions more than once over the three-year period of this economic analysis, the average burden per respondent is calculated as  $0.5/3 = 0.167$  hours/year.

- **CDX Registration:** Firms subject to fee payments are required to submit information to EPA using CDX. Companies submitting new chemical notices under TSCA section 5 are required through existing regulations to submit these notices using CDX and, so burden associated with new CDX registrants under TSCA section 5 is already accounted for in an existing ICR.<sup>16</sup> Similarly, firms subject to fee-triggering activities under TSCA section 4 are required to submit testing and other related information to EPA using CDX, so burden associated with new CDX registrants under TSCA section 4 is already accounted for in an existing ICR.<sup>17</sup> Manufacturers requesting risk evaluations are required to provide the submission package to EPA via CDX, so burden associated with new CDX registrants requesting risk evaluations is already accounted for in an existing ICR.<sup>18</sup> While some manufacturers subject to risk evaluations initiated by EPA under TSCA section 6 may already be familiar with the CDX system and may be registered CDX users from prior experience with TSCA submissions, there is no way to estimate which manufacturers are familiar with CDX and which are new to the system. Therefore, EPA assumes that all 58 manufacturers subject to EPA-initiated risk evaluations under TSCA section 6 each year are new CDX users and, therefore, are experiencing this burden for the first time. This burden is assumed to occur once for each affected firm over the three-year period of this rule. Since EPA assumes that no firm will be subject to any action more than once over the three-year period of this rule, the average burden per respondent is calculated as  $0.5/3 = 0.167$  hours/year.
- **Self-identification and Certification:** Firms that are either subject to fees or have been identified by EPA as being subject to fees under TSCA section 4 Test Rules and TSCA section 6 EPA-initiated risk evaluations must submit notice to EPA, identifying whether they (1) manufacture the identified chemical, (2) have already ceased manufacturing prior to the defined cutoff dates and will not manufacture for five years into the future, or (3) have not ever manufactured the chemical substance. Firms will be required to provide certain basic contact information and certify their statements of Cessation and/or No Manufacture. EPA estimates that 28 firms will report this information to EPA as a result of one Test Rule per year. Similarly, 58 firms are expected to report this information to EPA as a result of approximately eight EPA-initiated risk evaluations per year. EPA estimates this burden to occur once per respondent over the three-year period of this rule. Thus, the average annual burden is calculated as  $2.5/3 = 0.833$  hours/year.
- **Notification of Participation in Consortium:** The principal sponsor for firms subject to TSCA section 4 or 6 actions, who decide to join consortium, must notify EPA via CDX of the formation of the consortium and provide the following information: the name, address, telephone number and signature of the principle sponsor and the names and contact information for each

<sup>16</sup> See TSCA section 5 PMN ICR [https://www.reginfo.gov/public/do/PRAViewICR?ref\\_nbr=201806-2070-001](https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201806-2070-001)

<sup>17</sup> See TSCA section 4 ICR [https://www.reginfo.gov/public/do/PRAViewICR?ref\\_nbr=201712-2070-004](https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201712-2070-004)

<sup>18</sup> See TSCA section 6 Risk Evaluations rule ICR [https://www.reginfo.gov/public/do/PRAViewICR?ref\\_nbr=201707-2070-001](https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201707-2070-001)

manufacturer and/or processor associating with the consortium. For analytical purposes, EPA assumes that all firms will opt to join a consortium when possible, such that only one firm per TSCA section 4 and TSCA section 6 action will identify themselves as the principal sponsor of the consortium and experience this burden. EPA estimates that this will require 0.25 hours per year of technical burden to submit the information to EPA. EPA estimates this burden to occur once over the three-year period of this rule. Thus, the average annual burden is calculated as  $0.25/3 = 0.083$  hours/year.

- **Fee Payment via Pay.gov:** Firms are required to make fee payments electronically using the secure, web-based Pay.gov collection portal. Firms would be expected to create payment accounts in Pay.gov and use one of the electronic payment methods currently supported by Pay.gov (e.g., Automated Clearing House debits (ACH) from bank accounts, credit card payments, debit card payments, PayPal, or Dwolla). EPA estimates a burden of 0.5 hours per year of technical burden to collect the required information, create a Pay.gov account, and submit the fee payment. In cases where a consortium is formed, EPA expects that the principal sponsor for the consortium will be the one responsible for submitting the fee payment. For each firm submitting a fee payment through Pay.gov, the burden is estimated to occur once over the three-year period of this rule. Since EPA assumes that no firm will be subject to any of the TSCA section 4, 5, or 6 actions more than once over the three-year period of this rule, the average burden per respondent is calculated as  $0.5/3 = 0.167$  hours/year.
- **Consortia Non-Reporting Administrative Costs:** The final rule allows the formation of, and payment by, consortia for firms subject to actions under TSCA sections 4 and 6. Administrative costs associated with managing testing consortia are estimated to total 15 percent of the total laboratory costs, which could be as high as approximately \$1.7 million for a “standard” testing battery.<sup>19</sup> While EPA recognizes that there may be significant administrative costs associated with forming and managing consortia, for firms subject to testing requirements under TSCA section 4 actions, EPA expects that testing consortia will be formed for purposes of coordinating the required testing and will, therefore, not incur significant additional costs for coordination of the fee payment. For firms subject to risk evaluations initiated by EPA under TSCA section 6, however, the ability to form consortia for coordination of fee payment is new under this final rule and the estimated administrative costs associated with forming consortia are, therefore, accounted for in this rule. EPA estimates the cost per consortium to form and coordinate the fee payment for an EPA-initiated risk evaluation as five percent of the fee for EPA-initiated risk evaluations ( $5\% \times \$1.35$  million fee/3), for a total of \$22,500 in administrative costs per TSCA section 6 consortium per year. EPA estimates that one consortium will form for each risk evaluation initiated by EPA each year, for a total of approximately eight consortia and approximately \$187,000 in non-reporting administrative consortium costs each year.

### 5.1.1 Loaded Wages

To estimate firm opportunity costs, EPA obtained wage rates from the Bureau of Labor Statistics’ (BLS) Employer Costs for Employee Compensation (ECEC) Supplementary Tables (BLS, 2018). EPA used the wage rate for Professional/Technical workers, Management, Business, and Financial, and Office and Administrative Support in private manufacturing industries.

EPA calculated loaded wage rates, which include fringe and overhead. Fringe benefits are calculated based on the ratio of benefits to total compensation from the March 2018 BLS Employer Costs for

<sup>19</sup> See section 4 ICR [https://www.reginfo.gov/public/do/PRAICList?ref\\_nbr=201712-2070-004](https://www.reginfo.gov/public/do/PRAICList?ref_nbr=201712-2070-004)

Employee Compensation data series (BLS, 2018). An overhead rate of 17 percent is used based on assumptions in Wage Rates for Economic Analysis of the Toxics Release Inventory Program (Rice, 2002) and the Revised Economic Analysis for the Amended Inventory Update Rule: Final Report (EPA, 2001). The loaded industry wage rates used to determine the total firm opportunity costs are presented in Table 5-1.

Table 5-1: Industry Wage Rates							
Labor Type	Data Sources	Date	Wage	Fringes as % Wage	Over-head % wage <sup>a</sup>	Fringe + Overhead Factor <sup>b</sup>	Loaded Wages <sup>c</sup> Table 2-4
			(a)	(b)	(c)	(d)=(b)+(c)+1	(a)×(d)
Professional / Technical	<b>Wage and Fringe Benefits:</b> ECEC: "Professional and related: Private Manufacturing Industries"	18-Mar	\$46.08	53%	17%	1.70	\$78.54
Managerial	<b>Wage and Fringe Benefits:</b> ECEC: "Management, Business, and Financial: Private Manufacturing Industries"	18-Mar	\$47.19	48%	17%	1.65	\$77.83
Clerical	<b>Wage and Fringe Benefits:</b> ECEC: "Office and Administrative Support: Private Manufacturing Industries"	18-Mar	\$20.55	54%	17%	1.71	\$35.20

**Footnotes:**

<sup>a</sup> An overhead rate of 17% is used based on assumptions in Wage Rates for Economic Analysis of the Toxics Release Inventory Program (Rice, 2002), and the Revised Economic Analysis for the Amended Inventory Update Rule: Final Report (U.S. EPA, 2002).

<sup>b</sup> The inflation factor of "1" in the formula for calculating the fringe + overhead factor means wage data are not escalated to reflect inflation.

<sup>c</sup> Wage data are rounded to the closest cent in this analysis."

### 5.1.2 TSCA section 4 Affected Entity Opportunity Costs

Table 5-2 presents the estimated total opportunity costs to firms subject to TSCA section 4 fees. Based on past experience with Test Rules for HPV chemicals and expected work under TSCA as amended, EPA expects an average of seven chemicals per TSCA section 4 action and an average of four firms per chemical, totaling an estimated 28 firms per TSCA section 4 action. As EPA is expecting to initiate 12 TSCA section 4 actions in the first year, 10 in the second year, and 12 in the third year, we estimate a total of 336, 280, and 336 firms, respectively, each year. Firms submitting fees for TSCA section 4 actions are estimated to incur costs associated with rule familiarization, determining eligibility for the reduced fee, submitting information on joining a consortium on CDX, notification and certification of being subject to the action or not, and fee payment once over the three years of the analysis. The estimated total industry opportunity cost for the first year is approximately \$7,000, with an annualized opportunity cost of approximately \$6,500, using the 3% or 7% discount rates.<sup>20</sup>

<b>Table 5-2: Summary of Initial Annual Total Industry Burden and Opportunity Costs Associated with TSCA section 4 Actions (\$2018)</b>					
<b>Burden Type</b>	<b>Number of Firms</b>	<b>Burden Per Firm per year</b>	<b>Total Burden</b>	<b>Cost Per Firm</b>	<b>Total Cost</b>
Rule familiarization	336	0.167	56.0	\$13.09	\$4,398
Notification of participation in consortia	12	0.083	1.0	\$6.55	\$79
Reduced fee eligibility determination	84	0.167	14.0	\$12.97	\$1,090
Self-identification and Certification ("reporting form")	28	0.833	23.3	\$58.23	\$1,630
Fee payment	12	0.167	2	\$13.09	\$157
<b>Total TSCA section 4 Industry Opportunity Cost</b>					<b>\$7,354</b>

### 5.1.3 TSCA section 5 Affected Entity Opportunity Costs

Table 5-3 presents the average annual total opportunity cost to firms subject to TSCA section 5 fees. EPA estimates firms subject to TSCA section 5 actions will incur costs associated with rule familiarization and fee payment. Additionally, a proportion of TSCA section 5 firms will incur the costs associated with reduced fee eligibility determination. TSCA section 5 actions are estimated to total 1,022 submissions per year, and this estimate is based on a 20% reduction in the number of PMNs received by EPA in FY16, to account for higher fees, plus the number of Exemption notices received by EPA in FY16. The estimated total industry opportunity cost per year for TSCA section 5 firms is about \$29,000.

<sup>20</sup> Details of estimates of the second-year and third year-opportunity costs for TSCA section 4 actions are presented in Appendix B.

<b>Table 5-3: Summary of Annual Total Industry Opportunity Costs Associated with TSCA section 5 Actions (\$2018)</b>					
<b>Final Fee Category</b>	<b>Number of Firms</b>	<b>Burden Per Firm per year</b>	<b>Total Burden</b>	<b>Cost Per Firm</b>	<b>Total Cost</b>
<b>Rule familiarization</b>					
PMN/MCAN/SNUN	462	0.167	77.0	\$13.09	\$6,048
Exemptions <sup>a</sup>	560	0.167	93.3	\$13.09	\$7,330
<b>Total</b>	<b>1022</b>		<b>170.3</b>		<b>\$13,378</b>
<b>Reduced fee eligibility determination</b>					
PMN/MCAN/SNUN	74	0.167	12.3	\$12.97	\$960
Exemptions <sup>a</sup>	90	0.167	15.0	\$12.97	\$1,167
<b>Total</b>	<b>164</b>		<b>27.3</b>		<b>\$2,127</b>
<b>Fee Payment</b>					
PMN/MCAN/SNUN	462	0.167	77.0	\$13.09	\$6,048
Exemptions <sup>a</sup>	560	0.167	93.3	\$13.09	\$7,330
<b>Total</b>	<b>1022</b>		<b>170</b>		<b>\$13,378</b>
<b>Total Paperwork Burden</b>					
<b>PMNs/MCAN/SNUN</b>					<b>\$13,055</b>
<b>Exemptions <sup>a</sup></b>					<b>\$15,828</b>
<b>Estimated Total Industry Opportunity Cost per Year for All Affected Entities</b>					<b>\$28,883</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles.					

#### 5.1.4 TSCA section 6 Affected Entity Opportunity Costs

Table 5-4 presents the estimated total costs to firms subject to TSCA section 6 fees under the final rule. The amended TSCA regulations specify the number of risk evaluations that EPA must have ongoing over the three years covered by this rule. EPA uses the mandated number of risk evaluations to estimate the cost of the rule for TSCA section 6 activities. The Agency expects to have between 20 and 30 risk evaluations ongoing in any given year at different stages in the review process, including manufacturer-requested evaluations, for an average of 10 risk evaluations per year. Based on these assumptions, the total estimated industry burden cost for TSCA section 6 actions is about \$4,000 per year.

<b>Table 5-4: Summary of Annual Total Industry Burden and Costs Associated with TSCA section 6 Actions (\$2018)</b>					
<b>Burden Type</b>	<b>Number of Firms</b>	<b>Burden Per Firm per year</b>	<b>Total Burden</b>	<b>Cost Per Firm</b>	<b>Total Cost</b>
Rule familiarization	60	0.167	10.0	\$13.09	\$785
CDX Registration	58	0.167	9.7	\$13.09	\$759
Notification of participation in consortia	8	0.083	0.7	\$6.55	\$55
Reduced fee eligibility determination	24	0.167	4.0	\$12.97	\$311
Self-identification and Certification	58	0.833	48.3	\$58.23	\$3,377
Fee payment	10	0.167	1.7	\$13.09	\$131
Consortia costs	8			\$22,500	\$187,425
<b>Total TSCA section 6 Industry Costs</b>					<b>\$192,844</b>

## 5.2 Agency Burden

EPA currently has infrastructure in place for collecting fees for administering TSCA section 5 actions. Under the current infrastructure, EPA’s New Chemicals Program receives a high volume of TSCA section 5 submissions, along with their corresponding fee payments. Submissions from industry under TSCA section 5 involve a much larger number of entities compared with the expected number of entities to be affected by the new fee collection requirements under this final rule. Therefore, the Agency does not expect a major effort involved in setting up an entirely new infrastructure for fee collections under this final rule. Rather, the new fees and the higher existing fees will be paid into existing systems: Pay.gov. EPA estimates the additional Agency burden to be limited to the collection and review of information about firms submitting fees under the final rule. Agency activities will include data collection, management and end-of-year summarization for review in order to continue refining the estimated number of annual submissions and the costs of administering these TSCA programs. The Agency burden that’s captured in this EA represents the level of effort beyond what the Agency already expends to receive, track, and manage fee payments for existing chemicals under TSCA section 5.

EPA anticipates focusing on data management for fees associated with TSCA section 4 and TSCA section 6, as data has not previously been collected for actions under these sections of TSCA. EPA estimates this data management will require 80 hours of work per year for GS-13 Step 5 level employees in the Washington D.C. area.

To calculate the loaded wage rate, EPA uses the wage rate for a GS-13, Step 5 employee in the Washington D.C. area, loaded with a combined fringe and overhead factor of 60% to obtain a loaded wage rate of \$175,252 per year. Dividing this wage rate over 2,080 hours – the annual labor hours of a full-time employee – produces an hourly wage rate of \$84.26 (See Table 5-5).

EPA estimates the data management will require one day of work per year for a GS-13, Step 5 employee in the Washington D.C. area, which will amount to an annual Agency cost associated with the final rule of \$6,740 ( $\$84.26 \times 80 = \$6,740.48$ ).

Table 5-5 Agency Wage Rate (2018\$)									
Labor Category	Data Source for Wage Information	Wage (\$/year)	Fringe Benefit	Fringes as % wage	Overhead as % wage	Fringe + Overhead Factor	Loaded Wage (\$)	Yearly Labor (hrs./year)	Hourly Wage
		(a)	(b)	(c) = (b) / (a)	(d)	(e) = (c) + (d) + 1	(f) = (a) * (e)	(g)	(h) = (f) / (g)
EPA staff	Annual federal staff cost: OPM Washington-Baltimore-Northern Virginia, DC-MD-PA-VA-WV area, GS 13, step 5	\$109,533	Included in 60% overhead	N/A	60% <sup>b</sup>	1.6	\$175,252	2,080	\$84.26

**Source:** Source: U.S. Office of Personnel Management. (2018). Salary Table 2018-DCB. Retrieved March 26, 2018 from Pay & Leave: Salaries & Wages: [https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/18Tables/html/DCB\\_h.aspx](https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/18Tables/html/DCB_h.aspx).

**Note:** The fringe and overhead rates are included as per an EPA guide, *Instructions for Preparing ICRs* (US EPA, 2009).

### **5.3 Total Social Cost**

Total social cost for this final rule is comprised of both the opportunity cost to industry for new requirements under TSCA sections 4, 5, and 6 and the additional Agency burden expected in order to collect information about firms submitting fees under the final rule. The total opportunity cost to industry is approximately \$231,000 and the additional Agency burden is approximately \$7,000, yielding a total social cost of approximately \$238,000 for this final rule.

## 6. Small Entity Analysis

This chapter addresses the potential impacts of the final rule on small entities. Section 6.1 discusses the regulatory requirement for this analysis. Section 6.2 describes the methodology used to determine the impacts on small entities. Section 6.3 presents the data and calculations used in the small entity analysis. Section 6.4 summarizes the results of the small entity analysis.

### 6.1 Regulatory Requirement for Small Business Analysis

The Regulatory Flexibility Act (RFA) of 1980, amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996, requires regulators to assess the effects of regulations on small entities including businesses, nonprofit organizations, and governments. In some instances, agencies are also required to examine regulatory alternatives that may reduce adverse economic effects on significantly impacted small entities. The RFA requires agencies to prepare an initial and final regulatory flexibility analysis for each rule unless the Agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. The RFA, however, does not specifically define “a significant economic impact on a substantial number” of small entities. Sections 603 and 604 of the RFA require that regulatory flexibility analyses identify the types and estimate the numbers of small entities to which the rule will apply; and describe the rule requirements to which small entities will be subject and any regulatory alternatives, including exemptions and deferral, which would lessen the rule’s burden on small entities.

This analysis considers the impacts of the final rule on small entities in the affected industry sectors. The impact of this final rule is the fee that firms will be expected to pay for all TSCA section 4, TSCA section 5, and TSCA section 6 actions identified by EPA. Affected SBA-defined small business concerns will pay reduced fees.

PMN/MCAN/SNUN submitters and exemption submitters under TSCA section 5 classified as small businesses based on the SBA NAICS code-specific size thresholds would pay fees reduced by 80% of the general business fee, with the exception of PMN/MCAN/SNUN submitters paying \$2,800.

EPA expects multiple firms to be subject to each TSCA section 4 and 6 action and intends to allow consortia to be formed to determine how the fees will be split amongst the affected firms subject to the final fees. While the final rule encourages a discount be given to eligible small businesses, it is up to the consortia to determine the actual discount amount for each eligible small business. In the event that only one company is subject to the fee for a particular TSCA section 4 or TSCA section 6 action and that company qualifies as a small business as defined by the final rule, EPA will offer a fee reduction of 80 percent for a TSCA section 4 or TSCA section 6 action. This fee reduction will also apply if all affected firms are small businesses.

#### 6.1.1 Definition of Small Entities

Small entities include small businesses, small organizations, and small governmental jurisdictions. However, small entities to be affected by this final rule are not expected to be small organizations or government jurisdictions. SBA provides the authoritative standard on what constitutes a “small” business in the United States. Federal programs and regulations concerning small businesses generally adhere to SBA’s size standards. SBA’s size standards can be found in the Code of Federal Regulations (CFR) Part 121. The SBA determines the definition of small businesses based on either

annual firm revenue or the number of firm employees, depending on the industry sector. Table 2-2, presented earlier, lists NAICS codes that will most likely contain affected firms.

Note that the SBA definitions of small business concerns may be different from the definition of “small business” eligible for discounted fees in the final rule for firms in NAICS codes not included in Table 2-1 (i.e., firms employing no more than 500 employees); therefore, only some SBA-defined small businesses could pay the discounted fees. However, EPA does not include such small businesses in this analysis, as no information was available on the likelihood of such firms being affected at the time of the analysis.

## 6.2 Methodology Overview

As mentioned above, the RFA considers whether a rule would have a significant economic impact on a substantial number of small entities (SISNOSE). This analysis estimates that 298 small businesses, as defined by the SBA size standards, are expected to be affected by this final rule each year (see section 3.4.2(A) for discussion on EPA’s estimates of the number of affected small businesses), EPA estimates that the cost impacts for all those small businesses will not be significant.

The SBA size standards are measured at the firm or parent company level. This analysis also estimates a potential impact on small businesses at the highest level of corporate structure, known as a parent company, which incorporates the enterprise with its affiliates. The cost impact is assessed at the parent company level rather than at the facility level because parent companies commonly are ultimately responsible for the compliance costs of individual facilities. Therefore, both costs and revenue figures are estimated at the parent company level. To estimate parent company (or entity) annual cost, EPA did not have to aggregate costs of individual facilities to their parent companies because data used in this analysis is presented as parent company-level submissions. Similarly, the revenue data reported by the Census were obtained at the firm level, which is an equivalent of a parent company.

Ideally, EPA would conduct a detailed small entity analysis at the parent company level as follows:

- 1) Identify parent companies (and their revenues) of affected entities using databases such as Dun & Bradstreet (D&B);
- 2) Estimate annual compliance costs (amount of fees to be paid per year) at the parent company level;
- 3) Estimate cost impacts for individual parent companies.

However, while EPA may have a list of names of parent companies that have been subject to TSCA sections 4, 5, and 6 actions in past years, the information provided may not be sufficient to identify each individual parent company. In addition, a firm that was previously subject to a TSCA action will not necessarily be subject to a future action. As a result, the Agency conducted a small entity analysis at the industry sector level as follows:

- 1) Identify NAICS codes for the affected companies (six-digit NAICS codes for chemical manufacturers, petroleum refineries, and chemical and petroleum wholesalers.).
- 2) Obtain the annual average revenue distribution for parent entities in the affected NAICS codes using U.S. Census data (revenue data at the firm level were used as an equivalent for parent-level sales data).
- 3) Within the affected NAICS code categories, identify the percentage of small businesses based on the SBA definitions and the EPA threshold for parent entities eligible for reduced fees.

- 4) Estimate the annual cost impact and the percentage of small parent entities expected to experience an impact of less than 1 percent, between 1 percent and 3 percent, and more than 3 percent.

## **6.3 Small Entity Analysis Calculations and Results**

### **6.3.1 Estimating the Universe of Affected Entities**

EPA did not have data on the full universe of affected entities that might be subject to fees under TSCA sections 4, 5, and/or 6. EPA expects that entities potentially affected by the final rule will include chemical manufacturers and processors, petroleum refineries, and chemical and petroleum wholesalers. EPA included the six-digit NAICS codes within the Chemical Manufacturing sector (with the 325 three-digit NAICS Code), the six-digit NAICS code denoting Petroleum Refineries (324110), and the three 6-digit NAICS codes representing Chemical and Petroleum Merchant Wholesalers (424690, 424710, and 424720). This resulted in 33 six-digit NAICS codes (see Table 2-1 above for full list).<sup>21</sup>

EPA used these 33 NAICS categories as a basis for estimating the universe of potentially affected entities. The set of affected entities is likely to change from year to year, so new firms are likely to enter the universe in the future. However, EPA believes that the core industry sector categories associated with companies subject to the TSCA sections affected by this final rule are likely to stay the same. Therefore, the number of entities within the identified NAICS codes would serve as an appropriate measure of the affected universe. It is important to note that some entities within the affected NAICS codes are unlikely to be involved in activities related to section 4, 5, or 6 as chemical manufacturing and processing is a minor part of their business, and would never need to pay fees under any one of the TSCA sections subject to this final rule. Therefore, this method is likely to overestimate the total number of potentially affected entities.

### **6.3.2 Estimating Annual Revenue for Affected Parent Companies**

To identify the small parent entities in the universe, EPA used the entities within the 33 identified NAICS codes that meet the SBA small business definition standards. These small entities may be subject to a reduced fee under this final rule.

EPA used U.S. Census data at the firm level to obtain revenue figures for parent entities in the potentially affected universe.<sup>22</sup> The U.S. Census Statistics of U.S. Business (SUSB) data include the total annual receipts (defined as the revenue for goods produced, distributed, or services provided) for each NAICS by employment size. EPA divided total annual revenue reported in SUSB for each NAICS/ employee size category by the number of firms to determine the average revenue for each NAICS/ employment size class combination.

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<sup>21</sup> EPA expects that entities to be affected by this proposed rule are more likely to have these NAICS codes. There may be some potentially affected entities within other NAICS codes, but not all entities within those NAICS codes will be affected entities. This analysis does not involve identification of the specific entities and these NAICS codes are used to characterize the average sales of the universe of potentially affected entities.

<sup>22</sup> The definition of “firm” by the Census corresponds to the “parent” entity used in this analysis.

In some instances, total revenue for specific employment size classes was not reported by the SUSB because it would disclose the operations of individual firms within the NAICS category.<sup>23</sup> For those NAICS-specific employment size classes that SUSB did not report revenue, EPA estimated average revenue figures using the following method:

- 1) Calculate the percent difference between the average revenue figures in adjacent employment size classes based on all NAICS codes affected by this final rule that are populated with revenue information.
- 2) For the NAICS/employment size class combination with missing revenue data, multiply the average revenue of the adjacent employment size class in that NAICS code by the average percent difference between the two employment size classes, estimated in Step 1.
- 3) Where the revenue figures are available for both adjacent employment size classes, Step 2 is performed twice: (1) using the revenue figure from the employment category on one side of the missing value, multiplied by the corresponding percent difference, then (2) using the revenue figure from the employment category on the other side of the missing value multiplied by the corresponding percent difference. The average between the two is the estimated revenue for the missing value for a NAICS/employment size class combination.

In total, 20,083 small businesses in NAICS/employment size classes where the number of employees is less than the SBA small business definition were included in this analysis. Any small businesses in the selected NAICS codes may be eligible for a reduced fee if they are affected by the final rule.

### **6.3.3 Estimating Small Business Impacts**

EPA has determined that firms in the identified NAICS codes classified as small businesses based on the SBA small business thresholds are subject to reduced TSCA section 5 fees when they submit a notice or exemption application seeking to manufacture a new chemical or use a chemical in a new way. Under the final rule, the cost for these eligible small businesses submitting a PMN, SNUN, or MCAN includes the reduced fee and the firm paperwork burden (\$2,800 + \$30). To experience an impact of greater than 1% or greater than 3% of annual sales (significant impact, as determined by EPA), a reduced fee-paying small business submitting one of these types of notices would have to have annual sales of less than \$282,958 or \$94,000, respectively. The cost for a reduced-fee paying small business submitting exemptions such as Test Marketing Exemption Application (TME), TSCA Experimental Release Application (TERA), Low Volume Exemption (LVE), Low Release/Low Exposure Exemption (LoREX), Tier II, or Film Article exemption under the final rule would be \$970. To experience an impact of greater than 1% or greater than 3% of annual sales, a reduced fee-paying small business submitting one of these types of notices would have to have annual sales less than \$96,958 or \$32,000, respectively.

Based on the low level of the fee amounts final for small business, annual sales would have to be quite low to trigger a significant impact from the fee associated with a TSCA section 5 submission. Total fee amounts for a small business would be a multiple of the number of submissions from that business, but EPA assumes that all small businesses would only be subject to one action over the 3-year period for this rule, based on the average number of affected chemicals per firm under the HPV Test Rules and the first ten Priority Chemicals for Risk Evaluation. In this cost-impact analysis, in addition to the fee, EPA also considers the opportunity cost from additional paperwork posed by the

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<sup>23</sup> Census usually withholds revenue data for industries and employment size categories when the number of establishments is small.

new fee structure (henceforth referred to as social cost). The small business fees and the minimum sales for fees that would trigger an impact of greater than 1 % and 3% for small businesses under TSCA section 5 are presented in Table 6-1 below.

<b>Table 6-1: TSCA section 5 Small Business Cost-Revenue Impact 1% and 3% Thresholds</b>			
<b>Final Fee Category</b>	<b>Small Business Fees + Opportunity Costs per Firm</b>	<b>Annual Sales Threshold to Trigger a &gt;1% Impact</b>	<b>Annual Sales Threshold to Trigger a &gt;3% Impact</b>
<i>Impact triggers for small businesses that pay reduced fees</i>			
PMN/MCAN/SNUN <sup>b</sup>	\$2,830	\$282,958	\$94,000
Exemptions <sup>a</sup>	\$970	\$96,958	\$32,000
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles.			
<sup>b</sup> Includes intermediate PMNs			

Small businesses would become subject to TSCA section 4 or TSCA section 6 fees if they manufacture (including import) a chemical that EPA selects for generation of information under TSCA section 4 or if they manufacture (including import) a chemical that EPA selects for risk evaluation under TSCA section 6. The impact on small businesses would depend on the fee imposed, the total number of entities subject to the action, and the procedures that a consortium of affected entities adopts for splitting the fee among affected firms (if a consortium is formed). All affected SBA-defined small businesses will be eligible for an 80% discount on the TSCA section 4 fee and TSCA section 6 fee per affected firm. The remainder of the collected fees will be the responsibility of the remaining affected firms subject to that action. Table 6-2 presents the final fees for TSCA section 4 and TSCA section 6 actions for the final rule.

<b>Table 6-2: Fees for TSCA section 4 and TSCA section 6</b>		
<b>TSCA section 4 Actions</b>	<b>Final Fee</b>	<b>Reduced Fee Paid by Each Small Business</b>
Test Order	\$9,800	\$70
Test Rule	\$29,500	\$211
Enforceable Consent Agreement (ECA)	\$22,800	\$163
<b>TSCA section 6 Action</b>		
EPA-Initiated Risk Evaluation	\$1,350,000	\$38,571

Assuming 28 firms per TSCA section 4 action<sup>24</sup>, seven firms per TSCA section 6 action<sup>25</sup>, and an even split of the fee among affected firms with the applicable discount to the eligible small businesses, Table 6-3 indicates the sales threshold that would trigger an impact of greater than 1% or greater than 3% for a small business paying the reduced fees under the final rule.

<b>Table 6-3: TSCA section 4 and 6 Small Business Cost-Revenue Impact with Reduced Fees</b>			
<b>Final Fee Category</b>	<b>Small Business Fees + Opportunity Cost per Firm<sup>a</sup></b>	<b>Annual Sales Threshold to Trigger &gt;1% Impact</b>	<b>Annual Sales Threshold to Trigger &gt;3% Impact</b>
<b>TSCA section 4</b>			
Test Order	\$167	\$17,000	\$6,000
Test Rule	\$250	\$25,000	\$8,000
Enforceable Consent Agreement (ECA)	\$260	\$26,000	\$9,000
<b>TSCA section 6</b>			
EPA-Initiated Risk Evaluation	\$38,630	\$3,863,000	\$1,288,000
<sup>a</sup> This analysis assumes an average of 28 firms per TSCA section 4 action, and seven firms per TSCA section 6 action, based on an average number of firms affected by the High Production Volume (HPV) chemicals Test Rules under TSCA section 4 and the first ten chemicals identified for TSCA section 6 review under TSCA as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, respectively.			

To provide some context for the sales amounts that would lead to impacts greater than 1% or greater than 3% of sales, the average and median firm-level revenues for small businesses likely to have submissions for TSCA sections 4, 5, and 6 actions are shown in the table below. EPA used the median revenues of the NAICS codes impacted by each section as an estimate of the revenue of a typical affected small business.<sup>26</sup> Thus, the median revenue for all small business firms likely to be affected by TSCA sections 4 and 6 actions is \$5,445,000, and the median revenue for small business firms likely to be affected by TSCA section 5 actions is \$3,475,000. Compared to the small business fees per firm presented in Table 6-2 and Table 6-3, the largest cost-revenue impact for the typical reduced fee-paying small business affected by a TSCA section 5 action under the final rule is 0.08% (\$2,830/\$3,475,000), 0.005% (\$260/\$5,445,000) for a TSCA section 4 action, and 0.07% (\$38,630/\$5,445,000) for a TSCA section 6 action.

<sup>24</sup> Estimate is based on the average number of manufacturers per chemical included in the TSCA section 4 actions for HPV 1, 2, and 3 and an EPA assumption of an average of seven chemicals involved per action under Section 4. EPA's assumption of an average of seven chemicals per Section 4 action underpins the estimate of total fees required for each category of Section 4 actions.

<sup>25</sup> Estimate is based on the average number of manufacturers of first ten chemicals for review under the Toxic Substances Control Act as amended by the Frank R. Lautenberg Chemical Safety for the 21<sup>st</sup> Century Act.

<sup>26</sup> Firms with a 325 and 324 3-digit NAICS code within the affected sectors are likely to be affected by TSCA section 5 actions, where firms with any of the NAICS codes listed in the Table 2-2 are likely to be affected by Section 4 and 6 actions.

<b>Table 6-4: Average and Median Revenue for Small Businesses in the Industries Likely to be Affected</b>		
<b>Final Fee Category (Applicable NAICS codes)</b>	<b>Average</b>	<b>Median</b>
TSCA sections 4 and 6 (324110, 325, 424690, 424710, and 424720)	\$33,162,236	\$5,445,250
TSCA section 5 (324110 and 325)	\$18,890,122	\$3,475,263

### 6.3.4 Number of Affected Small Businesses

Since the number of small businesses affected by the final rule is dependent on the specific action (i.e., firm decision for TSCA section 5 actions, EPA decision based on ongoing data collection actions under TSCA section 4, and risk evaluations under TSCA section 6), EPA estimates a number of affected small businesses by looking at historical actions as well as using best professional judgment. Section 3.2.1 of this document presents in more detail the assumptions used by EPA to estimate the number of small businesses likely to be affected by TSCA sections 4, 5, and 6 in this analysis.

EPA estimates that 84 small businesses (based on 12 actions per year, seven chemicals per action, and one small business affected per chemical) may be affected annually by TSCA section 4 actions; 190 small businesses may be affected by TSCA section 5 actions; and 24 small businesses may be affected by TSCA section 6 actions. As a result, EPA estimates that, of the 298 small businesses paying fees every year, all small businesses may have annual cost-revenue impacts less than 1%, as shown with the largest small business cost-revenue ratios in section 6.3.3.

## 6.4 Summary of Small Business Impacts

EPA estimates that, of the 298 small businesses paying fees every year, all small businesses may have annual cost-revenue impacts less than 1%.

Given the expected pace of twelve TSCA section 4 and eight TSCA section 6 actions per year, it is unlikely that substantial numbers of small businesses would be affected. However, the impact on any particular small businesses subject to TSCA section 6 fees would be highest, compared to the impact of fees for TSCA section 4 and TSCA section 5 actions. Table 6-5 shows the expected first-year fee collection from all small businesses under the final rule. Estimated annual fee collections are calculated as the sum of the fee per firm, multiplied by the number of small business firms affected per action in a year. Annualized fee collections, in addition to estimated collections from years 2 and 3, are presented in Appendix C. Overall, small businesses are estimated to account for over \$1.3 million of total fee collections, or roughly 6% of the total fee collection.

**Table 6-5: First-Year Estimated Small Business Social and Transfer Costs**

Final Fee Category	Estimated Number of Small Business Eligible for Reduced Fee	Small Business Reduced Fee + Opportunity Cost Per Firm	Total Reduced Fees + Opportunity Costs Paid by Eligible Small Business	Total Fees + Opportunity Costs Paid by Small Business
<b>TSCA section 4</b>				
Test Order	70	\$167	\$11,716	\$11,716
Test Rule	7	\$250	\$1,749	\$1,749
Enforceable Consent Agreement (ECA)	7	\$260	\$1,822	\$1,822
<b>Total</b>	<b>84</b>		<b>\$15,287</b>	<b>\$15,287</b>
<b>TSCA section 5</b>				
PMNs/MCAN/SNUN	86	\$2,828	\$243,230	\$243,230
Exemptions <sup>a</sup>	104	\$968	\$100,699	\$100,699
<b>Total</b>	<b>190</b>		<b>\$343,930</b>	<b>\$343,930</b>
<b>TSCA section 6</b>				
Risk Evaluation	24	\$38,630	\$927,125	\$927,125
<b>Total</b>	<b>298</b>		<b>\$1,286,342</b>	<b>\$1,286,342</b>

## 7. Other Impacts

In addition to the cost analysis presented in Chapter 3 and the small business analysis presented in Chapter 6, several other types of impacts are important to consider in evaluating the effects of a regulation. This chapter presents the incremental impact of the final rule on:

- Employment;
- Technological innovation and the national economy;
- Paperwork burden, as required by the Paperwork Reduction Act (PRA);
- Agency Burden;
- State and Local Governments, as required by the Unfunded Mandates Reform Act (UMRA);
- Environmental Justice, as required by Executive Order 12898–Environmental Justice;
- The environmental health risk or safety risk to children due to the regulation, as required by Executive Order 13045–Protection of Children from Environmental Health & Safety Risks.
- Federalism, as required by Executive Order 13132–Federalism;
- Tribal governments, as required by Executive Order 13175–Consultation and Coordination with Indian Tribal Governments; and
- Energy supply, as required by Executive Order 13211.

### 7.1 Employment Impact Analysis

In addition to a cost-benefit analysis, EPA also examines the employment impacts of regulations promulgated under TSCA. Executive Order 13563, states, “Our regulatory system must protect public health, welfare, safety, and our *environment* while promoting economic growth, innovation, competitiveness, and *job creation*” (emphasis added). For this final rule, EPA presents a qualitative assessment of possible employment impacts in the short- and long-term for firms which might be directly affected by the final rule. Due to the fees’ relatively low cost and one-time nature, EPA estimates there will be no short- or long-term employment impacts associated with the final rule.

First, due to the relatively low cost of the fees in comparison with firm revenue, EPA does not expect any short-term employment impacts. For TSCA section 5 actions, the highest fee assessed for an individual firm is approximately \$16,000. This fee will only be incurred by those firms that are not considered to be small businesses. The highest fee incurred by small businesses under TSCA section 5 will be \$2,800. EPA does not expect these fees to be high enough in proportion to the annual sales of small firms expecting to submit PMNs, MCANs, or SNUNs in any given year to create short-term or long-term employment impacts. For TSCA sections 4, and 6, EPA expects that an affected firm will most likely have to pay a fee once in a given three-year period. Even with the highest estimated fee per firm, about \$38,630, which corresponds to about 0.07% of the estimated annual sales for a typical small business firm likely to be affected by this final rule, EPA estimates that this cost impact is not high enough to result in long-term employment impacts, as only a few firms may incur the cost each year.<sup>27</sup>

Secondly, due to the nature of the final rule, EPA employs a simplifying assumption that an affected entity will not pay fees for TSCA sections 4 and 6 more than once over the three-year period of analysis for this final rule, based on the average number of affected chemicals per firm under the

<sup>27</sup> See section 3.4 for details on EPA’s estimation of the average cost per firm for section 6 actions.

HPV Test Rules and the first ten Priority Chemicals for Risk Evaluation. This may not be the case with submissions under TSCA section 5; however, we expect that the fees final for notices under TSCA section 5 are low enough to have a negligible or no impact on short-term or long-term employment effects. TSCA section 4 fees will be assessed once with the submission of test data. EPA estimates affected firms will incur a one-time cost associated with the risk-screening process under TSCA section 6. A one-time cost is incurred for review of a chemical under TSCA section 5. EPA assumes this format will continue under the promulgation of the final rule.

Due to the relatively low cost of TSCA sections 4 and 5 actions, the singular nature of fees associated with TSCA section 4, 5, and 6 actions, and the low number of firms that would be affected by this final rule, EPA assumes no short-term or long-term employment effects. Estimated cost impacts for TSCA sections 4, 5, and 6 actions are less than 1% of annual sales for the affected firms.

## **7.2 Impacts on Technological Innovation and the National Economy**

The final rule is expected to have some impacts on technological innovation or the national economy. However, guidance issued by the Office of Management and Budget (OMB) indicates that the economic impact of a regulation on the national economy becomes measurable only if the economic impact of the regulation reaches 0.25 percent to 0.5 percent of Gross Domestic Product (GDP) (See Memorandum from Sally Katzen, “Guidance for Implementing Title II of [UMRA],” March 31, 1995). Given the current GDP, this is equivalent to a cost of \$40 billion to \$80 billion. EPA assumes that there will be, on average, a 20% reduction in innovations (under TSCA section 5 actions) as a result of the final rule and the affirmative determination for new chemicals under the new law. EPA does not expect the cost of the reduction in innovations to amount to \$40 billion, as final fees are insignificant compared with the \$40 billion revenue: meaning, the discouraged innovation will be those that would not result in that magnitude of revenue for the innovators. Therefore, EPA has concluded that this rule is highly unlikely to have any measurable effect on the national economy.

## **7.3 Paperwork Burden Analysis**

This section presents a summary of the industry burden and costs associated with the final rule for the following firm activities: read and familiarize themselves with the rule; determine their eligibility for paying reduced fees; register for CDX; form, manage and notify EPA of participation in consortia; notify EPA and certify whether they will be subject to the action or not; and arrange to submit fee payments via Pay.gov. EPA estimates the industry burden by multiplying the estimated number of annual responses (base number of firms expected to be affected and annual number of actions) by the estimated additional time the final rule will require per response. EPA estimates the total number of annual actions by the average number of responses of the preceding three years presented in the TSCA section 5 information collect request (ICR).

Section 7.3.1 presents the industry burden and costs for TSCA section 4 actions; Section 7.3.2 presents the burden and costs for TSCA section 5 actions; and Section 7.3.3 presents the industry burden for TSCA section 6 actions. The detailed paperwork burden analysis is presented in the (ICR) supporting statement for this final rulemaking.

The paperwork burden and associated costs include the activity types listed below. Note that not all entities incur burden or costs for all of these actions. EPA assumes that only a portion of affected entities with annual revenues close to the revenue-based small business threshold established by this final rule will spend time determining if they qualify for the small business discount.

- Rule Familiarization:** EPA assumes that each firm subject to a fee will spend 0.5 hours becoming familiar with the requirements of the final rule and developing an understanding of what actions are necessary to comply with the fee payment requirements. This is estimated as a one-time burden. The burden is estimated to occur the first time a firm is affected by the final rule. For analytical purposes, EPA assumes that no firm will be subject to any of the fee-triggering actions under TSCA sections 4, 5, or 6 more than once over the three-year period of this rule. Therefore, the average burden per respondent for each of the three years of analysis is calculated as  $0.5/3 = 0.167$  hours/year.
- Reduced Fee Eligibility Determination:** The final rule establishes reduced fees for Small businesses. EPA estimates 0.5 hours of managerial burden to review the firm records to determine the firm's eligibility for a discounted fee and compare. EPA assumes that the proportion of firms that will incur this burden is roughly equivalent to the proportion of affected firms that are small businesses, as defined by the Small Business Administration (SBA). EPA estimates that SBA-defined small businesses account for one in four firms for TSCA section 4 actions, 18.56% of affected firms for TSCA section 5 actions, and 24 of the 60 total firms for TSCA section 6 actions. This may be an overestimate as some SBA-defined small businesses may already know their small business classification threshold will not spend the time to confirm eligibility for the reduced fee. This burden is assumed to occur once for each affected firm over the three-year period of this rule. Since EPA assumes that no firm will be subject to any of the TSCA section 4, 5, or 6 actions more than once over the three-year period of this rule, the average burden per respondent is calculated as  $0.5/3 = 0.167$  hours/year.
- CDX Registration:** Firms subject to fee payments are required to submit information to EPA using CDX. Companies submitting new chemical notices under TSCA section 5 are required though existing regulations to submit these notices using CDX and, so burden associated with new CDX registrants under TSCA section 5 is already accounted for in an existing ICR.<sup>28</sup> Similarly, firms subject to fee-triggering activities under TSCA section 4 are required to submit testing and other related information to EPA using CDX, so burden associated with new CDX registrants under TSCA section 4 is already accounted for in an existing ICR.<sup>29</sup> Manufacturers requesting risk evaluations are required to provide the submission package to EPA via CDX, so burden associated with new CDX registrants requesting risk evaluations is already accounted for in an existing ICR.<sup>30</sup> While some manufacturers subject to risk evaluations initiated by EPA under TSCA section 6 may already be familiar with the CDX system and may be registered CDX users from prior experience with TSCA submissions, there is no way to estimate which manufacturers are familiar with CDX and which are new to the system. Therefore, EPA assumes that all 58 manufacturers subject to EPA-initiated risk evaluations under TSCA section 6 each year are new CDX users and, therefore, are experiencing this burden for the first time. This burden is assumed to occur once for each affected firm over the three-year period of this rule. Since EPA assumes that no firm will be subject to any action more than once over the three-year period of this rule, the average burden per respondent is calculated as  $0.5/3 = 0.167$  hours/year.

<sup>28</sup> See TSCA section 5 PMN ICR [https://www.reginfo.gov/public/do/PRAViewICR?ref\\_nbr=201806-2070-001](https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201806-2070-001)

<sup>29</sup> See TSCA section 4 ICR [https://www.reginfo.gov/public/do/PRAViewICR?ref\\_nbr=201712-2070-004](https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201712-2070-004)

<sup>30</sup> See TSCA section 6 Risk Evaluations rule ICR [https://www.reginfo.gov/public/do/PRAViewICR?ref\\_nbr=201707-2070-001](https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201707-2070-001)

- Self-identification and Certification:** Firms that are either subject to fees or have been identified by EPA as being subject to fees under TSCA section 4 Test Rules and TSCA section 6 EPA-initiated risk evaluations must submit notice to EPA, identifying whether they (1) manufacture the identified chemical, (2) have already ceased manufacturing prior to the defined cutoff dates and will not manufacture for five years into the future, or (3) have not ever manufactured the chemical substance. Firms will be required to provide certain basic contact information and certify their statements of Cessation and/or No Manufacture. EPA estimates that 28 firms will report this information to EPA as a result of one Test Rule per year. Similarly, 58 firms are expected to report this information to EPA as a result of approximately eight EPA-initiated risk evaluations per year. EPA estimates this burden to occur once per respondent over the three-year period of this rule. Thus, the average annual burden is calculated as  $2.5/3 = 0.833$  hours/year.
- Notification of Participation in Consortium:** The principal sponsor for firms subject to TSCA section 4 or 6 actions, who decide to join consortium, must notify EPA via CDX of the formation of the consortium and provide the following information: the name, address, telephone number and signature of the principle sponsor and the names and contact information for each firm associating with the consortium. For analytical purposes, EPA assumes that all firms will opt to join a consortium when possible, such that only one firm per TSCA section 4 and TSCA section 6 action will identify themselves as the principal sponsor of the consortium and experience this burden. EPA estimates that this will require 0.25 hours per year of technical burden to submit the information to EPA. EPA estimates this burden to occur once over the three-year period of this rule. Thus, the average annual burden is calculated as  $0.25/3 = 0.083$  hours/year.
- Fee Payment via Pay.gov:** Firms are required to make fee payments electronically using the secure, web-based Pay.gov collection portal. Firms would be expected to create payment accounts in Pay.gov and use one of the electronic payment methods currently supported by Pay.gov (e.g., Automated Clearing House debits (ACH) from bank accounts, credit card payments, debit card payments, PayPal, or Dwolla). EPA estimates a burden of 0.5 hours per year of technical burden to collect the required information, create a Pay.gov account, and submit the fee payment. In cases where a consortium is formed, EPA expects that the principal sponsor for the consortium will be the one responsible for submitting the fee payment. For each firm submitting a fee payment through Pay.gov, the burden is estimated to occur once over the three-year period of this rule. Since EPA assumes that no firm will be subject to any of the TSCA section 4, 5, or 6 actions more than once over the three-year period of this rule, the average burden per respondent is calculated as  $0.5/3 = 0.167$  hours/year.
- Consortia Non-Reporting Administrative Costs:** The final rule allows the formation of, and payment by, consortia for firms subject to actions under TSCA sections 4 and 6. Administrative costs associated with managing testing consortia are estimated to total 15 percent of the total laboratory costs, which could be as high as approximately \$1.7 million for a “standard” testing battery.<sup>31</sup> While EPA recognizes that there may be significant administrative costs associated with forming and managing consortia, for firms subject to testing requirements under TSCA section 4 actions, EPA expects that testing consortia will be formed for purposes of coordinating the required testing and will, therefore, not incur significant additional costs for coordination of the fee payment. For firms subject to risk evaluations initiated by EPA under TSCA section 6, however, the ability to form consortia for coordination of fee payment is new under this final rule

<sup>31</sup> See section 4 ICR [https://www.reginfo.gov/public/do/PRAICList?ref\\_nbr=201712-2070-004](https://www.reginfo.gov/public/do/PRAICList?ref_nbr=201712-2070-004)

and the estimated administrative costs associated with forming consortia are, therefore, accounted for in this rule. EPA estimates the cost per consortium to form and coordinate the fee payment for an EPA-initiated risk evaluation as five percent of the fee for EPA-initiated risk evaluations (5% x \$1.35 million fee/3), for a total of \$22,500 in administrative costs per TSCA section 6 consortium per year. EPA estimates that one consortium will form for each risk evaluation initiated by EPA each year, for a total of approximately eight consortia and approximately \$187,000 in non-reporting administrative consortium costs each year.

The paperwork burden for this final rule is as reported as the social costs in Chapter 5 and the results are restated below.

### 7.3.1 TSCA section 4 Industry Burden and Costs

Table 7-1 presents the estimated total opportunity costs to firms subject to TSCA section 4 fees. Based on past experience with Test Rules for HPV chemicals and expected work under TSCA as amended, EPA expects an average of seven chemicals per TSCA section 4 action and an average of four firms per chemical, totaling an estimated 28 firms per TSCA section 4 action. As EPA is expecting to initiate 12 TSCA section 4 actions in the first year, 10 in the second year, and 12 in the third year, we estimate a total of 336, 280, and 336 firms, respectively, each year. Firms submitting fees for TSCA section 4 actions are estimated to incur costs associated with rule familiarization, determining eligibility for the reduced fee, submitting information on joining a consortium on CDX, notification and certification of being subject to the action or not, and fee payment once over the three years of the analysis. The estimated total industry opportunity cost for the first year is approximately \$7,000, with an annualized opportunity cost of approximately \$6,500, using the 3% or 7% discount rates.<sup>32</sup>

<b>Table 7-1: Summary of Initial Annual Total Industry Burden and Opportunity Costs Associated with TSCA section 4 Actions (\$2018)</b>					
<b>Burden Type</b>	<b>Number of Firms</b>	<b>Burden Per Firm per year</b>	<b>Total Burden</b>	<b>Cost Per Firm</b>	<b>Total Cost</b>
Rule familiarization	336	0.167	56.0	\$13.09	\$4,398
Notification of participation in consortia	12	0.083	1.0	\$6.55	\$79
Reduced fee eligibility determination	84	0.167	14.0	\$12.97	\$1,090
Self-identification and Certification ("reporting form")	28	0.833	23.3	\$58.23	\$1,630
Fee payment	12	0.167	2	\$13.09	\$157
<b>Total TSCA section 4 Industry Opportunity Cost</b>					<b>\$7,354</b>

### 7.3.2 TSCA section 5 Industry Burden and Costs

Table 7-2 presents the average annual total opportunity cost to firms subject to TSCA section 5 fees. EPA estimates firms subject to TSCA section 5 actions will incur costs associated with rule familiarization and fee payment. Additionally, a proportion of TSCA section 5 firms will incur the costs associated with reduced fee eligibility determination. TSCA section 5 actions are estimated to total 1,022 submissions per year, and this estimate is based on a 20% reduction in the number of PMNs received by EPA in FY16, to account for higher fees, plus the number of Exemption notices received by EPA in FY16. The estimated total industry opportunity cost per year for TSCA section 5 firms is about \$29,000.

<sup>32</sup> Details of estimates of the second-year and third year-opportunity costs for TSCA section 4 actions are presented in Appendix B.

<b>Table 7-2: Summary of Annual Total Industry Opportunity Costs Associated with TSCA section 5 Actions (\$2016)</b>					
<b>Final Fee Category</b>	<b>Number of Firms</b>	<b>Burden Per Firm per year</b>	<b>Total Burden</b>	<b>Cost Per Firm</b>	<b>Total Cost</b>
<b>Rule familiarization</b>					
PMN/MCAN/SNUN	462	0.167	77.0	\$13.09	\$6,048
Exemptions <sup>a</sup>	560	0.167	93.3	\$13.09	\$7,330
<b>Total</b>	<b>1022</b>		<b>170.3</b>		<b>\$13,378</b>
<b>Reduced fee eligibility determination</b>					
PMN/MCAN/SNUN	74	0.167	12.3	\$12.97	\$960
Exemptions <sup>a</sup>	90	0.167	15.0	\$12.97	\$1,167
<b>Total</b>	<b>164</b>		<b>27.3</b>		<b>\$2,127</b>
<b>Fee Payment</b>					
PMN/MCAN/SNUN	462	0.167	77.0	\$13.09	\$6,048
Exemptions <sup>a</sup>	560	0.167	93.3	\$13.09	\$7,330
<b>Total</b>	<b>1022</b>		<b>170</b>		<b>\$13,378</b>
<b>Total Paperwork Burden</b>					
<b>PMNs/MCAN/SNUN</b>					<b>\$13,055</b>
<b>Exemptions <sup>a</sup></b>					<b>\$15,828</b>
<b>Estimated Total Industry Opportunity Cost per Year for All Affected Entities</b>					<b>\$28,883</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles.					

### 7.3.3 TSCA section 6 Industry Burden and Costs

Table 7-3 presents the estimated total costs to firms subject to TSCA section 6 fees under the final rule. The amended TSCA regulations specify the number of risk evaluations that EPA must have ongoing over the three years covered by this rule. EPA uses the mandated number of risk evaluations to estimate the cost of the rule for TSCA section 6 activities. The Agency expects to have between 20 and 30 risk evaluations ongoing in any given year at different stages in the review process, including manufacturer-requested evaluations, for an average of 10 risk evaluations per year. Based on these assumptions, the total estimated industry burden cost for TSCA section 6 actions is about \$4,000 per year.

<b>Table 7-3: Summary of Annual Total Industry Burden and Costs Associated with TSCA section 6 Actions (\$2018)</b>					
<b>Burden Type</b>	<b>Number of Firms</b>	<b>Burden Per Firm per year</b>	<b>Total Burden</b>	<b>Cost Per Firm</b>	<b>Total Cost</b>
Rule familiarization	60	0.167	10.0	\$13.09	\$785
CDX Registration	58	0.167	9.7	\$13.09	\$759
Notification of participation in consortia	8	0.083	0.7	\$6.55	\$55
Reduced fee eligibility determination	24	0.167	4.0	\$12.97	\$311
Self-identification and Certification (“reporting form”)	58	0.833	48.3	\$58.23	\$3,377
Fee payment	10	0.167	1.7	\$13.09	\$131
Consortia costs	8			\$22,500	\$187,425
<b>Total TSCA section 6 Industry Costs</b>					<b>\$192,844</b>

## 7.4 Agency Burden

EPA estimates the Agency burden to be limited to the collection of information about firms submitting fees under the final rule. Agency actions will include data collection, management and end-of-year summarization for review in order to continue refining the estimated number of annual submissions and the costs of administering the final rule. EPA anticipates focusing on data management for fees associated with TSCA section 4 and TSCA section 6, as data has not previously been collected for actions under these sections of TSCA. EPA estimates this data management will require one day of work per year for a GS-13 Step 5 employee in the Washington D.C. area.

To calculate the loaded wage rate, EPA uses the wage rate for a GS-13, Step 5 employee in the Washington D.C. area, loaded with a combined fringe and overhead factor of 60% to obtain a loaded wage rate of \$175,252 per year. Dividing this wage rate over 2,080 hours – the annual labor hours of a full-time employee – produces an hourly wage rate of \$84.26 (See Table 7-4).

EPA estimates the data management will require 80 hours of work per year for GS-13, Step 5 level employees in the Washington D.C. area, which will amount to an annual Agency cost associated with the final rule of \$6,740 ( $\$84.26 \times 80 = \$6,740.48$ ).

Table 7-4 Agency Wage Rate (2018\$)									
Labor Category	Data Source for Wage Information	Wage (\$/year)	Fringe Benefit	Fringes as % wage	Overhead as % wage	Fringe + Overhead Factor	Loaded Wage (\$)	Yearly Labor (hrs./year)	Hourly Wage
		(a)	(b)	(c) = (b) / (a)	(d)	(e) = (c) + (d) + 1	(f) = (a) * (e)	(g)	(h) = (f) / (g)
EPA staff	Annual federal staff cost: OPM Washington-Baltimore-Northern Virginia, DC-MD-PA-VA-WV area, GS 13, step 5	\$109,533	Included in 60% overhead	N/A	60% <sup>b</sup>	1.6	\$175,252	2,080	\$84.26
<p><b>Source:</b> Source: U.S. Office of Personnel Management. (2018). Salary Table 2018-DCB. Retrieved March 26, 2018 from Pay &amp; Leave: Salaries &amp; Wages: <a href="https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/18Tables/html/DCB_h.aspx">https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/18Tables/html/DCB_h.aspx</a>.</p> <p><b>Note:</b> The fringe and overhead rates are included as per an EPA guide, <i>Instructions for Preparing ICRs</i> (US EPA, 2009).</p>									

## 7.5 Unfunded Mandate Reform Act

Title II of the Unfunded Mandates Reform Act (UMRA) of 1995, Pub. L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, Local, and Tribal governments, and the private sector. Under Section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for final and final rules with “Federal mandates” that might result in expenditures by State, Local, and Tribal governments, in the aggregate, or by the private sector, of \$100 million or more (when adjusted annually for inflation) in any one year. The final rule is not expected to affect state or Tribal governments, and this final rule will not result in annual expenditures of \$100 million or more for the private sector. As such, EPA has determined that this final rule does not impose any enforceable duty, contain any unfunded mandate, or otherwise have any effect on small governments, and that the requirements of Sections 202, 203, 204, or 205 of UMRA, 2 U.S.C. 1531–1538, do not apply to this final rule.

## 7.6 Executive Order 12898 - Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations* (59 FR 7629, February 16, 1994) establishes Federal executive policy on Environmental Justice (EJ). Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make EJ part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and actions on minority populations and low-income populations in the United States.

The Agency believes that the fees collected under this final rule, if finalized, will assist EPA and others in determining the potential hazards and risks associated with various chemicals manufactured and used in the United States. Therefore, although not directly affecting environmental justice-related concerns, these final fees will enable the Agency to better protect human health and the environment, including in low-income and minority communities.

The final rule is directed at all manufacturers and producers of chemical substances subject to actions under TSCA sections 4, 5, and 6. As described in Chapter 4, all consumers of these chemicals and the products made from them, as well as all workers who come into contact with these chemicals, could benefit if data regarding the chemicals’ health and environmental effects were developed. Therefore, it does not appear that the costs and the benefits of the final rule will be disproportionately distributed across different geographic regions or among different categories of individuals.

## 7.7 Executive Order 13045 - Protection of Children

Under Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks* (62 FR 19885, April 23, 1997), a regulation must be reviewed if the regulatory action is economically significant and concerns an environmental health risk or safety risk that may disproportionately affect children. EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children such that the analysis required under TSCA section 5-501 of the EO has the potential to influence the regulation. The final rule does not establish an environmental

standard intended to mitigate health or safety risks and will not have an annual effect on the economy of \$100 million or more, nor does it otherwise have a disproportionate effect on children.

## **7.8 Executive Order 13132 - Federalism**

Executive Order 13132, *Federalism* (64 FR 43255, August 10, 1999), directs federal agencies to consider whether a rule has federalism implications (i.e., whether it has substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132).

This final action does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

## **7.9 Executive Order 13175 - Tribal Implications**

Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments* (59 FR 22951, November 6, 2000), directs federal agencies to consider whether a rule has tribal implications (i.e., whether it has substantial direct effects on tribal governments, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes). EPA has determined that this final rule does not have tribal implications because it will not have any effect on tribal governments, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes. Thus, EO 13175 does not apply to the final rule.

## **7.10 Executive Order 13211 - Energy Supply, Distribution, or Use**

This final rule is not subject to Executive Order 13211, *Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use* (66 FR 28355, May 22, 2001), because it is not an economically significant regulatory action under Executive Order 12866.

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## Appendix A: Year Two and Year Three Fee Collection

### I. Year Two

Appendix Table A-1: Total Year Two Fee Collection								
Final Fee Category	Total Estimated Actions	Estimated General Fee Actions (A)	General Industry Fee Estimate per Action (B)	Estimated Annual Fee Recovery (C= A x B)	Small Business Estimated Actions (D)	Small Business Fee Estimate per Action (E)	Small Business Action Estimated Annual Fee Recovery (F = D x E)	Total General Industry & Small Business Fee Collections (C + F)
<b>TSCA section 4</b>								
Test Order	10	10	\$9,800	\$98,000				\$98,000
Test Rule	0	0	\$29,500	\$0				\$0
Enforceable Consent Agreement (ECA)	0	0	\$22,800	\$0				\$0
<b>TSCA section 5</b>								
PMN/MCAN/SNUN	462	376	\$16,000	\$6,016,000	86	\$2,800	\$240,800	\$6,256,800
Exemptions <sup>a</sup>	560	456	\$4,700	\$2,143,200	104	\$940	\$97,760	\$2,240,960
<b>TSCA section 6</b>								
EPA Initiated Risk Evaluation	8	8	\$1,350,000	\$11,250,000				\$11,250,000
<b>TOTAL</b>				<b>\$19,507,200</b>			<b>\$338,560</b>	<b>\$19,845,760</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles								

<b>Appendix Table A-2: Total Year Two Small Business Fee Collection</b>			
<b>Final Fee Category</b>	<b>Small Business Firms paying Reduced Fee (A)</b>	<b>Reduced Fee per Action (B)</b>	<b>Small Business Estimated Annual Fee Recovery (C = A x B)</b>
<b>TSCA section 4</b>			
Test Order	70	\$70	\$4,900
Test Rule	0	\$211	\$0
Enforceable Consent Agreement (ECA)	0	\$163	\$0
<b>TSCA section 5</b>			
PMN/MCAN/SNUN	86	\$2,800	\$240,800
Exemptions <sup>a</sup>	104	\$940	\$97,760
<b>TSCA section 6</b>			
EPA Initiated Risk Evaluation	24	\$38,571	\$925,714
<b>TOTAL</b>	<b>180</b>		<b>\$3,227,814</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles			

<b>Appendix Table A-3: Total Year Two Incremental Fee Collection</b>			
<b>Final Fee Category</b>	<b>Baseline Fee Collection</b>	<b>Total Fee Collection</b>	<b>Incremental Fee Collection</b>
<b>TSCA section 4</b>			
Test Order	\$0	\$98,000	\$98,000
Test Rule	\$0	\$0	\$0
Enforceable Consent Agreement (ECA)	\$0	\$0	\$0
<b>TSCA section 4 Total</b>	<b>\$0</b>	<b>\$98,000</b>	<b>\$98,000</b>
<b>TSCA section 5</b>			
PMN/MCAN/SNUN	\$1,224,200	\$6,256,800	\$5,032,600
Exemptions <sup>a</sup>	\$0	\$2,240,960	\$2,240,960
<b>TSCA section 5 Total</b>	<b>\$1,224,200</b>	<b>\$8,497,760</b>	<b>\$7,273,560</b>
<b>TSCA section 6</b>			
EPA Initiated Risk Evaluation	\$0	\$11,250,000	\$11,250,000
<b>Total</b>	<b>\$1,224,200</b>	<b>\$19,845,760</b>	<b>\$18,621,560</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles			

<b>Appendix Table A-4: Total Year Two Small Business Incremental Fee Collection</b>			
<b>Final Fee Category</b>	<b>Baseline Fee Collection</b>	<b>Total Fee Collection</b>	<b>Incremental Fee Collection</b>
<b>TSCA section 4</b>			
Test Order	\$0	\$4,900	\$4,900
Test Rule	\$0	\$0	\$0
Enforceable Consent Agreement (ECA)	\$0	\$0	\$0
<b>TSCA section 5</b>			
PMN/MCAN/SNUN	\$9,200	\$240,800	\$231,600
Exemptions <sup>a</sup>	\$0	\$97,760	\$97,760
<b>TSCA section 6</b>			
EPA Initiated Risk Evaluation	\$0	\$925,714	\$925,714
<b>Total</b>	<b>\$9,200</b>	<b>\$1,269,174</b>	<b>\$1,259,974</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles			

a. Year Three

Appendix Table A-5: Total Year Three Fee Collection								
Final Fee Category	Total Estimated Actions	Estimated General Fee Actions (A)	General Industry Fee Estimate per Action (B)	Estimated Annual Fee Recovery (C= A x B)	Small Business Estimated Actions (D)	Small Business Fee Estimate per Action (E)	Small Business Actions Estimated Annual Fee Recovery (F = D x E)	Total General Industry & Small Business Fee Collections (C + F)
<b>TSCA section 4</b>								
Test Order	10	10	\$9,800	\$98,000				\$98,000
Test Rule	1	1	\$29,500	\$29,500				\$29,500
Enforceable Consent Agreement (ECA)	1	1	\$22,800	\$22,800				\$22,800
<b>TSCA section 5</b>								
PMN/MCAN/SNUN	462	376	\$16,000	\$6,016,000	86	\$2,800	\$240,800	\$6,256,800
Exemptions <sup>a</sup>	560	456	\$4,700	\$2,143,200	104	\$940	\$97,760	\$2,240,960
<b>TSCA section 6</b>								
EPA Initiated Risk Evaluation	8	8	\$1,350,000	\$11,250,000				\$11,250,000
<b>TOTAL</b>				<b>\$19,559,500</b>			<b>\$338,560</b>	<b>\$19,898,060</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles								

<b>Appendix Table A-6: Total Year Three Small Business Fee Collection</b>			
<b>Final Fee Category</b>	<b>Small Business Firms paying Reduced Fee (A)</b>	<b>Reduced Fee per Action (B)</b>	<b>Small Business Estimated Annual Fee Recovery (C = A x B)</b>
<b>TSCA section 4</b>			
Test Order	70	\$70	\$4,900
Test Rule	7	\$211	\$1,475
Enforceable Consent Agreement (ECA)	7	\$163	\$1,140
<b>TSCA section 5</b>			
PMN/MCAN/SNUN	86	\$2,800	\$240,800
Exemptions <sup>a</sup>	104	\$940	\$97,760
<b>TSCA section 6</b>			
EPA Initiated Risk Evaluation	24	\$38,571	\$925,714
<b>TOTAL</b>	<b>298</b>		<b>\$1,271,789</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles			

<b>Appendix Table A-7: Total Year Three Incremental Fee Collection</b>			
<b>Final Fee Category</b>	<b>Baseline Fee Collection</b>	<b>Total Fee Collection</b>	<b>Incremental Fee Collection</b>
<b>TSCA section 4</b>			
Test Order	\$0	\$98,000	\$98,000
Test Rule	\$0	\$29,500	\$29,500
Enforceable Consent Agreement (ECA)	\$0	\$22,800	\$22,800
<b>TSCA section 4 Total</b>	<b>\$0</b>	<b>\$150,300</b>	<b>\$150,300</b>
<b>TSCA section 5</b>			
PMN/MCAN/SNUN	\$1,224,200	\$6,256,800	\$5,032,600
Exemptions <sup>a</sup>	\$0	\$2,240,960	\$2,240,960
<b>TSCA section 5 Total</b>	<b>\$1,224,200</b>	<b>\$8,497,760</b>	<b>\$7,273,560</b>
<b>TSCA section 6</b>			
EPA Initiated Risk Evaluation	\$0	\$11,250,000	\$11,250,000
<b>Total</b>	<b>\$1,224,200</b>	<b>\$19,898,060</b>	<b>\$18,673,860</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles			

<b>Appendix Table A-8: Total Year Three Small Business Incremental Fee Collection</b>			
<b>Final Fee Category</b>	<b>Baseline Fee Collection</b>	<b>Total Fee Collection</b>	<b>Incremental Fee Collection</b>
<b>TSCA section 4</b>			
Test Order	\$0	\$4,900	\$4,900
Test Rule	\$0	\$1,475	\$1,475
Enforceable Consent Agreement (ECA)	\$0	\$1,140	\$1,140
<b>TSCA section 5</b>			
PMN/MCAN/SNUN	\$9,200	\$240,800	\$231,600
Exemptions <sup>a</sup>	\$0	\$97,760	\$97,760
<b>TSCA section 6</b>			
EPA Initiated Risk Evaluation	\$0	\$925,714	\$925,714
<b>Total</b>	<b>\$9,200</b>	<b>\$1,271,789</b>	<b>\$1,262,589</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles			

## Appendix B: Year 2 and Year 3 TSCA section 4 Opportunity Costs

For TSCA section 4 Test Rules and ECAs, the number of actions expected to be initiated by differ for the three years under consideration. One Test Rule and ECA are expected to be initiated once every other year starting with the first year. As a result, the annualized average cost per affected firm does not equal the first year cost.

<b>Appendix Table B-1: Summary of Year 2 Total Firm Opportunity Costs Associated with TSCA section 4 Actions</b>					
<b>Burden Type</b>	<b>Number of Firms</b>	<b>Burden Per Firm per year</b>	<b>Total Burden</b>	<b>Cost Per Firm</b>	<b>Total Cost</b>
Rule familiarization	280	0.167	46.7	\$13.09	\$3,665
Notification of participation in consortia	10	0.083	0.8	\$6.55	\$65
Reduced fee eligibility determination	70	0.167	11.7	\$12.97	\$908
Self-identification and Certification ("reporting form")	0	0.833	0.0		\$0
Fee payment	10	0.167	1.7	\$13.09	\$131
<b>Total TSCA section 4 Industry Opportunity Cost</b>					<b>\$4,770</b>

<b>Appendix Table B-2: Summary of Year 3 Total Firm Opportunity Costs Associated with TSCA section 4 Actions</b>					
<b>Burden Type</b>	<b>Number of Firms</b>	<b>Burden Per Firm per year</b>	<b>Total Burden</b>	<b>Cost Per Firm</b>	<b>Total Cost</b>
Rule familiarization	336	0.167	56.0	\$13.09	\$4,398
Notification of participation in consortia	12	0.083	1.0	\$6.55	\$79
Reduced fee eligibility determination	84	0.167	14.0	\$12.97	\$1,090
Self-identification and Certification ("reporting form")	28	0.833	23.3	\$58.23	\$1,630
Fee payment	12	0.167	2	\$13.09	\$157
<b>Total TSCA section 4 Industry Opportunity Cost</b>					<b>\$7,354</b>

## Appendix C: Year 2 and Year 3 Small Business Fees & Opportunity Costs

Appendix Table C-1: Year 2 Estimated Small Business Fee Payments							
Final Fee Category	Estimated Number of Small Business Eligible for Reduced Fee	Small Business Reduced Fees + Opportunity Cost Per Firm	Total Reduced Fees + Opportunity Costs Paid by Eligible Small Business	Estimated Number of Other Small Business	General Fees + Opportunity Costs Per Firm	Total General Fees + Opportunity Costs Paid by Other Small Business	Total Fees + Opportunity Costs Paid by Small Business
<b>TSCA section 4</b>							
Test Order	70	\$167	\$11,716	0	\$470	\$0	\$11,716
Test Rule	0	\$250	\$1,749	0	\$0	\$0	\$0
Enforceable Consent Agreement (ECA)	0	\$260	\$1,822	0	\$0	\$0	\$0
<b>Total</b>	<b>70</b>		<b>\$15,287</b>	<b>0</b>		<b>\$0</b>	<b>\$11,716</b>
<b>TSCA section 5</b>							
PMN/MCAN/SNUN	86	\$2,828	\$243,230	0	\$16,028	\$0	\$243,230
Exemptions <sup>a</sup>	104	\$968	\$100,699	0	\$4,728	\$0	\$100,699
<b>Total</b>	<b>190</b>		<b>\$343,930</b>	<b>0</b>		<b>\$0</b>	<b>\$343,930</b>
<b>TSCA section 6</b>							
EPA Initiated Risk Evaluation	24	\$38,630	\$927,125	0	\$311,903	\$0	\$927,125
<b>Grand Total</b>	<b>284</b>		<b>\$1,286,342</b>	<b>0</b>		<b>\$0</b>	<b>\$1,282,771</b>

**Appendix Table C-2: Year 3 Estimated Small Business Fee Payments**

Final Fee Category	Estimated Number of Small Business Eligible for Reduced Fee	Small Business Reduced Fees + Opportunity Cost Per Firm	Total Reduced Fees + Opportunity Costs Paid by Eligible Small Business	Estimated Number of Other Small Business	General Fees + Opportunity Costs Per Firm	Total General Fees + Opportunity Costs Paid by Other Small Business	Total Fees + Opportunity Costs Paid by Small Business
<b>TSCA section 4</b>							
Test Order	70	\$167	\$11,716	0	\$470	\$0	\$11,716
Test Rule	7	\$250	\$1,749	0	\$1,420	\$0	\$1,749
Enforceable Consent Agreement (ECA)	7	\$260	\$1,822	0	\$1,058	\$0	\$1,822
<b>Total</b>	<b>84</b>		<b>\$15,287</b>	<b>0</b>		<b>\$0</b>	<b>\$15,287</b>
<b>TSCA section 5</b>							
PMN/MCAN/SNUN	86	\$2,828	\$243,230	0	\$16,028	\$0	\$243,230
Exemptions <sup>a</sup>	104	\$968	\$100,699	0	\$4,728	\$0	\$100,699
<b>Total</b>	<b>190</b>		<b>\$343,930</b>	<b>0</b>		<b>\$0</b>	<b>\$343,930</b>
<b>TSCA section 6</b>							
EPA Initiated Risk Evaluation	24	\$38,630	\$927,125	0	\$311,903	\$0	\$927,125
<b>Grand Total</b>	<b>298</b>		<b>\$1,286,342</b>	<b>0</b>		<b>\$0</b>	<b>\$1,286,342</b>

<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles

<b>Appendix Table C-3: Total Annualized Small Business Fee Payments</b>					
<b>Final Fee Category</b>	<b>Year 1 Fee Collections from Small Businesses</b>	<b>Year 2 Fee Collections from Small Businesses</b>	<b>Year 3 Fee Collections from Small Businesses</b>	<b>3-Year Annualized Fee Collections with 3% Discount</b>	<b>3-Year Annualized Fee Collections with 7% Discount</b>
<b>TSCA section 4</b>					
Test Order	\$11,716	\$11,716	\$11,716	\$11,716	\$11,716
Test Rule	\$1,749	\$0	\$1,749	\$1,166	\$1,167
Enforceable Consent Agreement (ECA)	\$1,822	\$0	\$1,822	\$1,215	\$1,215
<b>Total</b>	<b>\$15,287</b>	<b>\$11,716</b>	<b>\$15,287</b>	<b>\$14,097</b>	<b>\$14,099</b>
<b>TSCA section 5</b>					
PMN/MCAN/SNUN	\$243,230	\$243,230	\$243,230	\$243,230	\$243,230
Exemptions <sup>a</sup>	\$100,699	\$100,699	\$100,699	\$100,699	\$100,699
<b>Total</b>	<b>\$343,930</b>	<b>\$343,930</b>	<b>\$343,930</b>	<b>\$343,930</b>	<b>\$343,930</b>
<b>TSCA section 6</b>					
EPA Initiated Risk Evaluation	\$927,125	\$927,125	\$927,125	\$927,125	\$927,125
<b>Grand Total</b>	<b>\$1,286,342</b>	<b>\$1,282,771</b>	<b>\$1,286,342</b>	<b>\$1,285,152</b>	<b>\$1,285,154</b>
<sup>a</sup> Exemptions include test-marketing exemptions (TME), TSCA experimental release applications (TERA), low volume exemptions (LVE), low exposure/low release exemptions (LoREX), certain new microorganism (Tier II) exemptions, and film articles					