Supporting Statement for a Request for OMB Review under The Paperwork Reduction Act

1. IDENTIFICATION OF THE INFORMATION COLLECTION

1(a) Title of the Information Collection

Title: Partial Update of the TSCA Section 8(b) Inventory Data Base, Production and Site Reports (Chemical Data Reporting)

EPA ICR No.: 1884.08 OMB Control No.: 2070-0162

1(b) Short Characterization/Abstract

The following information collection request (ICR) addresses the paperwork requirements contained in the TSCA Chemical Data Reporting (CDR) rule, formerly known as the Inventory Update Rule or IUR, under the Toxic Substances Control Act (TSCA) (40 CFR Part 710). Under TSCA section 8(a) (15 USC 2607), the Environmental Protection Agency (EPA) is authorized to collect certain information on chemical substances manufactured (including imported) or processed in the United States. The CDR data provide chemical manufacture, processing and use information that helps EPA identify what chemicals the public may be exposed to as consumers or in commercial and industrial settings and to better assess routes of potential exposure to those chemicals. The Office of Pollution Prevention and Toxics (OPPT) has used the CDR rule to collect basic chemical substance manufacturing information for selected chemical substances on the TSCA Inventory seven times beginning in 1986, and to collect additional information relating to the manufacture, processing, and use of those chemical substances, beginning in 2006.

In August 2011, EPA published an amendment to the existing CDR rule, adding new requirements and thresholds, some of which were effective in the 2012 reporting cycle and others that will become effective in the 2016 reporting cycle. The changes to the CDR were characterized in the last ICR published in 2011. The non-confidential CDR information was made public through the Agency's CDR website (http://www.epa.gov/cdr). Several benefits of the 2011 rule update were evident in the most recent reporting cycle:

- *The requirement to use electronic reporting*. The elimination of paper-based submissions in favor of the requirement to report CDR information electronically greatly improved the reporting process, both for EPA and for manufacturers (including importers). The electronic reporting system (e-CDR) contained improved capabilities included an enhanced validation system that alerts users when a required field on the form is either missing information or contains certain kinds of potentially incorrect information. Electronic submission ensured that CDR data could be quickly incorporated into a database and ready for immediate Agency use, and eliminated data entry errors which occurred with paper submissions. Also the mandatory use of electronic reporting reduced the reporting burden on industry by reducing both the cost and the time required to review, edit and transmit the data to the Agency.

- *The requirement to use upfront substantiation for Confidential Business Information (CBI) claims.* As a result of this requirement, fewer CBI claims have been made. Submitters who claimed processing and use data as CBI needed to justify these claims, giving greater transparency and making more data/ information available to the public.

The 2011 amendments in the CDR contained four changes that will become effective in 2016: 1) the frequency of data collection changed from every five years to every four years; 2) the threshold for reporting process and use information will be lowered to 25,000 pounds; 3) the total annual production volume must be reported for all reporting years since the last reporting year (for 2016, years 2012-2015); and 4) the threshold for reporting manufacturing, processing and use information for certain regulated chemicals will be lowered to 2,500 pounds.

- *More frequent data collection*: Changes to reporting frequency from every five years to every four years will help to increase the Agency's ability to understand the chemical industry and monitor the production levels of chemical substances manufactured (including imported) in the United States. As chemical industry product lines and manufacturing in the United States change substantially from one submission period to the next, more current information enhances the Agency's ability to make more accurate chemical substance risk assessment and management decisions in a timely and cost effective manner. This is especially important because there are no alternative data sets as comprehensive as CDR for the chemical manufacturing industry.

- *Lower thresholds for processing and use reporting:* For 2016, the reporting threshold for processing and use information is 25,000 pounds. In 2012, the threshold was 100,000 pounds. This change provides exposure-related processing and use information to EPA and others for moderate-volume chemical substances, enabling the Agency to assess such chemical substances in the same manner as the higher-volume chemical substances.

The 2016 chemical data collection is expected to involve an average of approximately 4,991 respondents at an annual cost of $52 million during the ICR period. The details of the paperwork burden and cost estimates are discussed in this document.

2. NEED FOR AND USE OF THE COLLECTION

2(a) Need/Authority for the Collection

Under TSCA, EPA is charged with protecting human health and the environment from potential chemical risks. OPPT carries out its responsibilities by conducting risk assessments and, where necessary, taking risk management actions under TSCA, as well as by making non-confidential information publicly available in order to promote informed decision-making and transparency. CDR data helps the Agency to identify, assess, and control potential risks to human health and the environment posed by commercial chemical substances. TSCA section 8(a) authorizes the Administrator to promulgate rules to provide for the maintenance and collection of records from manufacturers (including importers) and processors of commercial chemical substances. Sections 8(a)(1) and (2) of TSCA also authorize the Agency to collect information on the chemical substance manufacturing (including importing) industry. EPA possesses broad

discretion in determining the information to be reported under TSCA section 8(a). The original IUR rule was codified at 40 CFR 710. In its August 2011 amendments, EPA moved the CDR rule to a new Part at 40 CFR 711.

In the CDR database, EPA collects basic exposure-related manufacturing, processing and use information used by the Agency and others in a wide range of activities. The 2016 CDR will provide more detailed information needed to better understand and interpret the state of U.S. chemical manufacturing and processing and use. More detailed information will further enhance the Agency's ability to identify, screen, and manage potential chemical substance risks. Manufacturers (including importers) will be required to report if, for any calendar year since 2011, a chemical substance was manufactured (including imported) at a site in production volumes of 25,000 pounds or greater. The reporting threshold for processing and use information will be 25,000 pounds which is lower than the 100,000 pounds threshold for processing and use information required in the 2012 CDR. Also, the reporting threshold will be 2,500 pounds for chemical substances that are:

- Subject of a rule proposed or promulgated under TSCA sections 5(a)(2), 5(b)(4), or 6;
- Subject of an order issued under TSCA sections 5(e) or 5(f);
- Subject of relief that has been granted under a civil action under TSCA sections 5 or 7.

Because exposure is a key component of risk, the CDR exposure-related information will allow OPPT to screen chemical substances based on the potential for risk in order to protect human health and the environment, as required by TSCA. The exposure-related data on manufacturing, processing, and use will potentially allow the Agency and others to avoid more burdensome regulatory requirements. These enhanced data will allow EPA to conduct a more effective and efficient screening level review of chemical substances to identify candidates for further evaluation or action.

Data reported under the 2016 CDR will enhance the capabilities of the Agency and other federal agencies to ensure risk management actions are taken on chemical substances posing the most concern. More in-depth reporting of processing and use data will better support a robust risk assessment and management program. By enhancing the data supplied to Agency risk-screening programs, EPA expects to more effectively and expeditiously identify and address potential risks posed by chemical substances and provide improved access and information to the public.

2(b) Practical Utility/Users of the Data

The reporting methods, including the reporting tool and electronic registration, ensure the information reported to EPA is accurate and in compliance with the CDR requirements.

e-CDRweb Reporting Tool

For the 2016 submission period, EPA will continue to require electronic reporting for all CDR submissions, including joint submissions and amendments. Persons submitting information

under the CDR rule are required to use e-CDRweb, the Agency-provided, web-based tool to complete Form U (the CDR reporting form). The information is submitted electronically via the Internet, through EPA's Central Data Exchange (CDX). Users of CDX are required to register with the system, including submitting an authorized signature agreement to EPA.

CDX Registration

Each CDR submission must have an associated authorized official. The authorized official signs the certification statement and submits the CDR report via CDX. To register in CDX, the CDX registrant (also referred to as "Electronic Signature Holder") completes an electronic signature agreement (ESA) form. For identity authentication, the registrant will complete the ESA, and either submit the form electronically or mail the form to EPA. Once EPA receives the form, EPA will activate the registrant's CDX account and send a notification via email.

A company may need or desire to have more than one individual complete an electronic signature agreement, so that more than one person can add information to an original CDR submission. Persons submitting supplemental information for a CDR submission on behalf of a company need to register with CDX by signing an ESA. The company official can authorize an unlimited number of support registrants and support registrants can work with an unlimited number of company officials. A support registrant may be an employee of the company, an outside consultant for the company, or an authorized representative agent for the company. While this individual is not able to sign the certification statement required for the initial CDR submission, he or she is able to provide additional information, if needed, using CDX.

Data Elements for CDR Submissions

The CDR information collection is the only mechanism through which EPA can collect basic information on commercial chemical substances listed on the TSCA Inventory, including production volume and other manufacturing (including importing), processing, and use exposure-related data. EPA will use the information it is collecting in the following ways:

(1) *U.S. parent company identification information*: Company identification information is collected already by the current CDR. EPA also requires reporting of company identification associated with the location of the company, and specifies that the company information is to be for the U.S. parent company associated with the reporting plant site. These data will help ensure the company information is consistently provided.

(2) *Manufacturing-related information*:

- *The production volume for each of the years since the last principal reporting year*: For the 2016 CDR information collection, manufacturers (including importers) need to report production volume information for calendar years 2012, 2013, 2014, and 2015. For subsequent CDR collections, determination of the need to report will be based on whether, for any calendar year since the last principal reporting year, a chemical substance was manufactured (including imported) at a site in production volumes of 25,000 pounds or greater. EPA will use these data for chemical manufacturing and

processing and use trend analyses; and for the assessment of the effectiveness of Agency and public programs, among other uses.

- *The production volume of a manufactured (including imported) chemical substance used at the reporting site:* This data element identifies whether a chemical substance is used by the reporting site. Either domestically manufactured or imported chemical substances can be reported as used at the reporting site. This information is related to potential exposures associated with the on-site volumes, and provides the Agency with information for exposure assessments and other data analyses.

- *Whether an imported chemical substance is physically at the reporting site*: This data element enables the Agency and others to better assess manufacturing-related potential exposures, thereby enabling information for screening-level analyses and other uses of the CDR data.

- *The production volume directly exported and not domestically processed or used*: This data element allows EPA to identify the completeness of the reported processing and use information, by indicating the proportion of the production volume potentially covered by the reported processing and use information. CDR processing and use information is required only for domestic use situations and is not required for any volumes directly exported. This data element informs the exposure profile for the U.S. public.

- *The number of workers exposed:* This data element allows EPA to identify the number of workers reasonably likely to be exposed to each reportable chemical substance during manufacture at each site. This exposure-related information allows OPPT to screen chemical substances based on the potential for risk in order to protect human health.

- *The maximum concentration of a chemical:* This data element provides maximum concentration measured by percentage of weight of a reportable chemical substance at the time it is reacted on-site to produce a different chemical substance or as it leaves the site.

- *Whether a manufactured (including imported) chemical substance, such as a byproduct, is being recycled, remanufactured, reprocessed, or reused*: This data element provides valuable information for the Agency and the public. It provides a sense of exposure profiles to chemicals and efficiencies within the chemical manufacturing industry. The information could also be used to encourage industry to find uses for wastes rather than disposing of the wastes, such as in a landfill.

- *The physical form of a chemical:* This data element provides the Agency with the total production volume of the chemical substance for each physical form reacted onsite or sent off-site. There are six physical forms.

(3) Processing and use information: Data elements that relate to processing and use help EPA, other agencies, and the general public to readily screen and prioritize chemicals for the purpose of identifying potential human health and environmental effects. For instance, the data are used in chemical substance exposure and risk screening, testing and/or priority setting, and exposure estimation required by TSCA section 4; for EPA monitoring activities of newly manufactured substances that have completed pre-manufacture notification (PMN) review under TSCA section 5(a); and to measure potential human and environmental exposure which helps inform various chemical risk analyses. Each data element corresponds to a data point necessary for basic risk-screening.

The reporting threshold for processing and use information will be 25,000 pounds for the 2016 CDR collection. This is lower than the 100,000 pounds threshold for processing and use information required in the 2012 CDR. Respondents who manufacture (including import) a chemical substance in volumes of 25,000 pounds or more at a single site will be required in 2016 to report processing and use information unless the chemical substance is partially exempt. This lower threshold will enable the Agency to understand how lower-volume chemical substances are used in the U.S. economy, in the same manner as the higher-volume chemical substances.

- *Industrial processing and use data*: This data element identifies the functions of the chemical substances. The industrial function categories include the type of process or use operation (TPU), the industrial sector (IS) codes and the Industrial Function Category (IFC). The IS codes reduce the number of choices available to the respondent, thus streamlining the reporting process and making the data easier to use. Processing and use information helps EPA, other agencies, and the general public to readily screen and prioritize chemicals for the purpose of identifying potential human health and environmental effects.

- *Consumer and commercial end-use exposure data:* These data are reported separately and are used to determine exposure potential based on consumer or commercial populations. These two populations are very different from each other, and the ability to distinguish uses between the two enables better exposure-based screening of the chemical substance. Additionally, within the consumer product category, submitters must report to the extent they know if the chemical is used in products intended for children. This information allows EPA and the public to better understand what is in children's products and allows the Age*n*cy to focus in on chemical risks related to children's health.

(4) Special considerations for Joint Submitters:

In certain situations CDR submitters are allowed to report the CDR information jointly with the supplier of the chemical substance for which the submitter is reporting. For example, importers may not know the specific chemical identity of the imported

TSCA chemical substance because the foreign supplier chooses to keep the information confidential. In addition, a manufacturer may not know the specific chemical identity of the substance being manufactured because the supplier of a reactant used to manufacture the substance chooses to keep the information confidential. In such situations, the manufacturer (including importer) is still responsible for ensuring that the CDR information is submitted to EPA and may do so by submitting a joint report. For example, in the case of an imported substance, the U.S. importer, as the primary submitter, completes the majority of the required information on Form U, and provides a trade name in Part II.2.A.4 of Form U to identify the chemical substance. The primary submitter then contacts the foreign supplier, who is the secondary submitter, to notify them of the need to report the specific chemical identity information directly to EPA in the joint submission section (Part IV) of Form U, using the electronic reporting tool, e-CDRweb. EPA has added Part IV to Form U to accommodate joint submissions. Because signatures are required by each party of a joint submission, they must each register with CDX, complete their own sections on Form U, and submit their own sections of the same report electronically to EPA. The secondary submitter will not be able to access the information provided by the primary submitter and vice versa. The electronic reporting tool will match both submissions based upon company and chemical information provided by the manufacturer (including importer), acting as a primary submitter, and by the supplier, acting as a secondary submitter. The information provided by the primary and secondary respondents will be saved and combined as one joint submission. EPA will process the joint submission once all Form Us are received and matched by the Agency.

This information collection allows EPA to connect submissions from the primary submitter and secondary submitter and to request clarification from the secondary submitter if needed. The data EPA will collect will be utilized in the following ways:

- *Joint submission information (primary registrant only):* The primary submitter provides only a trade name or other designation to identify the chemical substance being reported. Therefore, the requested data are needed by the Agency to identify the chemical substance correctly and provide the company name and complete mailing address of the secondary submitter.

- *Secondary company identification information:* These data identify the secondary submitter's company name and the complete mailing address of the company. The information provided helps ensure that the company information is provided consistently, and is used to associate the secondary submitter's company with the primary submitter's company and site plant.

- *Technical contact information:* The company's technical contact information provides EPA with the name and complete mailing address of the person who will be able to answer questions EPA may have about the reported chemical substance.

- *Primary company information*: These data provide the trade name and the unique identifier number for joint submissions. This is the number the primary submitter sent to the secondary submitter.

- *Trade product identification information*: These data identify the primary submitters' company name, site name, and site address, as well as the CAS Registry Number, the appropriate specific chemical identities, and product composition. These data are needed by EPA to combine the secondary submitters' chemical-specific information with the primary submitters' information to result in a complete CDR submission.

Information secured through the CDR collections is used increasingly by a wide variety of governmental and non-governmental users. Consistent with Congress' intent that TSCA data be used to facilitate any government public health and environment efforts, CDR data have been used by EPA's Office of Water, Office of Solid Waste and Emergency Response, and Office of Air and Radiation to identify and characterize particular chemical substances. Non-confidential CDR data are incorporated into a number of publicly accessible databases and products maintained by non-government organizations such as Right-To-Know-Net[1] and INFORM.[2] CDR data were used to identify chemical substances of particular concern for the National Institutes of Health. Non-confidential CDR data have also been released to selected states to help them identify facilities manufacturing suspected endocrine disrupters.

3. NON-DUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA

3(a) Non-Duplication

The data included in this information collection (i.e., production volume, chemical manufacture, exposure, and processing and use data) are not collected comprehensively or systematically at the national level by any other entity. There are a variety of sources for certain data elements, but none is as complete as CDR.

3(b) Public Notice Required Prior to ICR submission to OMB

In proposing to renew this ICR, EPA provided a 60-day public notice and comment period that ended on July 21, 2014 (79 FR 29442, May 22, 2014). EPA received two comments, from the American Chemistry Council (ACC) and the Society of Chemical Manufacturers and Affiliates (SOCMA), during the comment period. Copies of the comments and EPA's response to the comments are included as Attachment 4.

3(c) Consultations

Additionally, under 5 CFR 1320.8(d)(1), OMB requires agencies to consult with potential ICR respondents and data users about specific aspects of ICRs before submitting an ICR to OMB for review and approval. In accordance with this regulation, EPA submitted questions to eight parties via e-mail. The individuals contacted were:

[1]RTKNET.org is a project of the Center for Effective Government.

[2] INFORM is a nonprofit environmental research organization.

Mike Walls, Vice President
Regulatory and Technical Affairs
American Chemistry Council Inc.
700 2nd Street N.E.
Washington, D.C. 20002
Tel.: (202) 249-6400
E-mail: mike_walls@americanchemistry.com

Derek Swick, Senior Policy Advisor
Regulatory and Scientific Affairs
American Petroleum Institute
1220 L Street N.W.
Washington, D.C. 20005-4070
Tel.: (202) 682-8341
E-mail: swickd@api.org

Lawrence Robinson, President
Color Pigments Manufacturers Association
300 North Washington Street, Suite 105
Alexandria, VA 22314
Tel.: (703) 684-4044
E-mail: jlr@cpma.com

Bruce Watzman
Senior Vice President, Regulatory Affairs
National Mining Association
101 Constitution Avenue N.W., Suite 500 East
Washington, D.C. 20001
Tel.: (202) 463-2600
E-mail: bwatzman@nma.org

Brigid D. Klein, Vice President, General Counsel & Corporate Secretary
Consumer Specialty Products Association
1667 K Street N.W., Suite 300
Washington, D.C. 20006
Tel: (202) 833-7309
E-mail: bklein@cspa.org

Douglas Troutman, Vice President and Counsel
Government Affairs
American Cleaning Institute
1331 L Street N.W., Suite 650
Washington, D.C. 20005
Tel.: (202) 347-2900
E-mail: dtroutman@cleaninginstitute.org

William Carteaux, President
Society of the Plastics Industry (SPI)
1667 K Street N.W., Suite 1000
Washington, D.C. 20006
Tel.: (202) 974-5200
E-mail: wcarteaux@plasticsindustry.org

Bill Allmond, Director
Government Relations
Society of Chemical Manufacturers and Affiliates (SOCMA)
1850 M Street N.W., Suite 700
Washington, D.C. 20036-5810
Tel.: (202) 721-4122
E-mail: allmondb@socma.com

EPA received no responses to its solicitation for consultations. A copy of EPA's consultation e-mail to the above potential respondents is included in Attachment 5.

3(d) General Guidelines

This collection does not exceed any of the Paperwork Reduction Act (PRA) guidelines at 5 CFR 1320.6, with the exceptions listed below.

The record retention period of this collection is five years, as specified in 40 CFR 710.57, exceeding the PRA maximum of three years. This is necessary to ensure companies retain records long enough to facilitate completion of Form U (EPA Form 7740-8) in the 2016 and subsequent collections, which is every four years, and to allow EPA's enforcement activities to overlap two CDR reporting cycles.

Confidential Business Information (CBI) claims limit access to the CDR data, especially by the public. EPA recognizes that some information submitted to the Agency is legitimately confidential business information; because of this, EPA's review of CBI data is an inherently governmental function that EPA must perform to protect human health and the environment.

3(e) Confidentiality

Submitters may claim information reported to EPA under this rule as confidential if such information reveals the submitter's trade secrets or proprietary information as defined by TSCA section 14 and existing TSCA regulations. EPA has long-established procedures for handling, storing, processing, and disposing of TSCA confidential information. Transfers of this information to other governmental agencies can be made only if the other agency agrees to adhere to all TSCA confidentiality provisions. EPA will maintain standard CBI procedures to protect any confidential, trade secret, or proprietary information from disclosure in accordance with EPA's confidentiality regulation, 40 CFR Part 2, Subpart B.

3(f) Sensitive Questions

This collection does not include questions of a sensitive nature.

4. THE RESPONDENTS AND THE INFORMATION REQUESTED

4(a) Respondents/NAICS Codes

The regulated community consists of companies manufacturing (including importing) chemical substances listed on the TSCA Inventory and regulated under TSCA section 8. In general, the industry segments that compose the regulated community for the rule are those that produce or import organic and inorganic chemical substances. Most respondents previously reported information to the CDR. The Agency's previous experience with CDR collections has shown that the majority of the respondents affected by this collection activity are from the following North American Industrial Classification System (NAICS) code categories:

325 - Chemical Manufacturing
324 - Petroleum and Coal Product Manufacturing

The subsectors identified above represent the designation of sites that likely would be subject to CDR reporting. However this list does not include all potentially affected entities. Other types of entities not listed in this unit could also be subject to reporting.

Generally, TSCA section 8 excludes small manufacturers (including importers) from reporting. EPA defines small manufacturers (including importers) for purposes of CDR and certain other reporting in 40 CFR 704.3.

In addition to the anticipated respondents listed above, manufacturers (including importers) of byproducts are required to report under the CDR rule. Byproduct manufacturers (including importers) may be listed under a different primary activity for a site, such as NAICS codes 22, 322, 331, and 3344; e.g., utilities, paper manufacturing, primary metal manufacturing, and semiconductor and other electronic component manufacturing. For purposes of the CDR, a byproduct is "a chemical substance produced without a separate commercial intent during the manufacture, processing, use or disposal of another chemical substance or mixture" (40 CFR 704.3). Such a chemical substance, like any other manufactured chemical substance, is subject to CDR reporting if it is manufactured (including imported), is listed in EPA's TSCA Master Inventory File, is not otherwise excluded from reporting, and its manufacturer is not specifically exempted from CDR reporting requirements. For instance, a manufacturer (including importer) that uses a chemical substance in the production of an object may produce a byproduct substance that is chemically different from the starting substance; the manufacturer (including importer) therefore may incur reporting obligations under the CDR for that byproduct.

4(b) Information Requested

(i) Reporting Threshold for Certain Regulated Chemicals

The threshold for reporting to CDR is a production (including import) volume of 25,000 pounds at a single site for any calendar year since the previous reporting year. Beginning in 2016, the reporting threshold for processing and use information will be 2,500 pounds for certain chemical substances that are:

- The subject of a rule proposed or promulgated under TSCA sections 5(a)(2), 5(b)(4), or 6,
- The subject of an order issued under TSCA sections 5(e) or 5(f),
- The subject of relief that has been granted under a civil action under TSCA sections 5 or 7.

Chemical substances that are the subject of these particular TSCA actions are of demonstrated high interest to the Agency. This change will help to ensure the availability of current information when the Agency has expressed a concern in the form of regulatory action on those chemical substances manufactured below 25,000 pounds. EPA will use the CDR data associated with these regulated chemical substances to monitor chemical substance production and compliance with the rules.

(ii) Data elements, including recordkeeping requirements

The CDR data elements are related to or indicative of three components of exposure. These components are: (1) the number of ecosystems or size of human populations potentially exposed, (2) the potential human or environmental exposure concentrations, and (3) the frequency and duration of potential exposures. The data enhances EPA's ability to evaluate each of these components of exposure. Respondents are required to submit certain "known or reasonably ascertainable" manufacturing, processing, and use exposure-related information.

Using e-CDRweb, individuals report the data elements as follows:

- *Authorized company official's e-mail address*. The e-mail address of the company official authorized to sign and submit the CDR Form U.

- *U.S. parent company name and address*. The name and mailing address of the U. S. parent company. The requirement that the parent company reported must be the U.S. parent company.

- *Manufacturing information.* For the 2016 reporting cycle and subsequent reporting cycles, the production volume for each of the years since the last principal reporting year; the volume of the reported chemical substance used at the reporting site; whether an imported chemical substance is physically at the reporting site; the production volume directly exported and not domestically processed or used; and whether a manufactured (including imported) chemical substance, such as a byproduct, is being recycled, reused, reprocessed, or remanufactured.

- *Processing and use information.* The reporting threshold for processing and use information changed from the 2012 level of 100,000 pounds to 25,000 pounds for 2016 and subsequent CDR collections. Respondents are to report this information for all reported chemical substances, unless the chemical substance is specifically partially exempted.

- *Industrial processing and use data.* Submitters must report their industrial function. They choose from a list of industrial function categories.

- *Consumer and commercial use data*. Respondents must indicate whether the use is consumer, commercial or both, and, if commercial, the number of commercial workers reasonably likely to be exposed to the chemical must be reported as a range.

Joint Submissions. Joint submissions are allowed only in those instances where a supplier will not disclose to the respondent the specific chemical name of the imported TSCA Inventory chemical substance or of a reactant used to manufacture the TSCA Inventory substance. This may happen, for instance, when a company is importing a mixture under a trade name, and the foreign manufacturer does not want to reveal the components in the mixture. (See *Special Considerations for Joint Submitters* in section 2b, above.) Electronic reporting for both the primary and the secondary portions of a joint submission make it easier for respondents to report. In addition to signing the certification statement and completing Parts I, II, and III, primary respondents will report on data elements in Part II, Blocks 2.A.5 through 2.A.12, on Form U as follows:

- *Joint submission information.* Trade name of the chemical substance being reported, secondary respondent name, and complete mailing address (city, state/province, zip code, and country (if applicable)).

Secondary submitters register with CDX as secondary authorized submitter or a secondary support registrant. They will provide the primary company's information and the trade product name, supplied to them by the primary submitter, to gain access to the Form U containing information specific to the trade product name. After the secondary submitter is granted access to the form, they report on data elements in Part IV on Form U as follows:

- *Certification.* The company official must certify by signature and date that to the best of his/her knowledge and belief: 1) all information entered on Form U has been completed in compliance with the regulatory requirements; and 2) any confidentiality claims are true and correct as to that information for which they have been asserted.

- *Secondary company information.* The secondary company name and complete mailing address (city, state, zip code, and country (if applicable)).

- *Secondary technical contact information.* The technical contact name, phone number, complete mailing address (city/town, state/province, zip code, and country (if applicable)), and e-mail address.

- *Primary company information.* Trade name and the Unique Identifier for Joint Submissions number provided by the primary submitter and sent to the secondary submitter.

- *Trade product information.* The trade product name, chemical name, CAS Registry Number, ID code linking the primary and secondary submissions, and percentage of each chemical substance component of a trade product.

(iii) Submitter Activities/Information Collections (ICs)

EPA identified the following ICs in the currently-approved ICR for activities that submitters would complete when complying with the rule:

- Compliance Determination;
- Rule Familiarization;
- CDX Registration Activities;
- Report Preparation and Submission – Partial Reports including identity and manufacturing (including import) information;
- Report Preparation and Submission - Full Reports including identity, manufacturing(including import), processing and use information;
- Recordkeeping.

Table 1: Information Collections (ICs) for CDR Reporting

Information Collection	Description
Compliance Determination	Determine whether reporting is required for a chemical substance manufactured (including imported) at a particular site, based on the chemical substance's production volume and the applicability of certain reporting exemptions. For 2016 and all future reporting cycles, reporting is required if the production volume of a chemical substance meets or exceeds the 25,000 lb threshold (or 2,500 lb threshold, if applicable) for any calendar year since the last principal reporting year.
Rule Familiarization	Become familiar with the full requirements of the rule, which entails reading the rule, understanding the various reporting and administrative requirements, and determining the manner in which reporting requirements will be met for each chemical substance.
CDX Registration Activities	The CDR rule requires electronic reporting, and therefore requires that all submitters complete EPA's CDX registration process. As part of registering with CDX, each submitter will provide identifying information that will comprise all or most of the information requested in Part I of Form U (EPA Form 7740-8). This information will then be pre-populated whenever the submitter prepares a partial or full report. In order to submit electronically to EPA via CDX, the authorized official, who will be signing and submitting the site's CDR Form U, must register with CDX and must submit an ESA. Once the registration process is complete, the registered individual will be able to access the

	e-CDRweb reporting tool.
Prepare and Submit Report - Partial Report	Compile the required information, determine the CBI status of information and fulfill appropriate substantiation measures, and use the e-CDRweb tool to complete and submit only Parts I and II (and Part IV, if a joint submission) of Form U (EPA Form 7740-8) for chemical substances specifically listed in the regulation for which there is a partial reporting exemption.
Prepare and Submit Report - Full Report	Compile the required information, determine the CBI status of information and fulfill appropriate substantiation requirements, and use the e-CDRweb tool to complete and submit Parts I, II, III and, if a joint submission, Part IV, of Form U (EPA Form 7740-8).
Maintain Records	Retain all records related to the submission for five years after the submission period.

5. THE INFORMATION COLLECTED–AGENCY ACTIVITIES, COLLECTION METHODOLOGY, AND INFORMATION MANAGEMENT

5(a) Agency Activities

The Agency develops and maintains the electronic tool used to collect and verify data. Other activities routinely conducted by EPA related to the processing, analysis and storage of the information collected under this rule include the following:

- Review and verify submissions;
- Answer submitter questions and provide any necessary technical assistance;
- Process submissions for inclusion in CDR database;
- Review requests for confidentiality in the submissions;
- Maintain the database; and
- Distribute the data.

5(b) Collection Methodology and Management

The next CDR collection will occur in 2016. All manufacturers (including importers), except for those defined as “small manufacturers” by EPA’s regulations, are required to submit information on every substance subject to the 2011 rule that they manufacture (including import) in quantities that meet or exceed the CDR thresholds. The collection will occur every four years.

(i) Collection Methodology

Submitters are required to submit information associated with this data collection electronically via the Internet using e-CDRweb and CDX.

Potential submitters will be notified of the need to report in three ways: (1) make available guidance describing CDR reporting requirements at chemical industry conferences and meetings, (2) send email notices to previous CDR submitters, and (3) publish articles in the trade press.

Reporting materials, including a non-submission version of the e-CDRweb reporting tool and a variety of guidance documents (Instruction Manual, Q&As, Case Studies), are available on EPA's CDR website. Submitters also can obtain these materials from the TSCA Hotline. Submitters obtain the submission version of the e-CDRweb reporting tool as part of the CDX registration process, as described in section 4 of this document.

EPA will receive all CDR submissions electronically. The CDX registration process, required for all submitters, will provide a user ID, which the submitter will use to access e-CDRweb.

Information quality and validation begins with the e-CDRweb reporting tool, which is programmed to help the submitter provide the information required, in the correct format as required by the CDR rule.

To aid persons subject to this information collection, the Agency's TSCA and CDX Hotlines are available to answer questions regarding the CDR requirements or submission process. When Hotline staff is unable to answer questions, the submitter is referred to OPPT's Information Management Division (IMD) or Chemical Control Division (CCD), as appropriate. Submitters can also email their questions to the e-CDRweb mail site at eCDRweb@epa.gov. Other Divisions within OPPT or the Office of Environmental Information (OEI) are used as necessary.

(ii) Data Management

This section describes the Agency tasks required for efficiently processing submissions under the CDR. The tasks for which the Agency is responsible are presented under four main categories: database systems development, guidance document development, Form U processing, and additional tasks. The task descriptions presented below generally do not change from collection to collection.

CDR data is stored in a database managed by the Agency. Once updated, the CDR database is then available to EPA technical reviewers to search or export into their various analytical modeling systems and databases. The CDR database is also available for quick screening and other direct uses. The Agency makes publicly available as much information as possible, within the confines of protecting CBI.

- Database Systems Development and Maintenance -- The Agency develops and maintains adequate information systems in place to support the database that serves as the primary data storage medium for CDR collections. File servers with appropriate backup are used to contain the CDR databases.

- Guidance Document Development -- The Agency develops guidance to assist submitters in submitting data and complying with CDR requirements. The guidance documents are updated for each CDR cycle.
- Form U Processing -- The Agency is responsible for processing CDR Form U submissions. This includes developing standard operating procedures and documentation

for all stages in the CDR life cycle, tracking submissions, implementing quality assurance and control, maintaining file and databases, information security, disseminating data, and training staff. EPA receives CDR submissions over the Internet, using CDX.

- Additional Activities -- The Agency develops various supporting documents associated with the reporting tool and makes them available on the Internet. In addition, the Agency provides the TSCA Hotline with standardized responses for frequently asked questions; preparing mailings, mailing lists, and labels; and develops outgoing information materials.

5(c) Small Entity Flexibility

The CDR regulation provides flexibility to small entities. This regulation affects only businesses -- governmental jurisdictions and not-for-profit organizations are not required to take any action. Small manufacturers (including importers), in accordance with TSCA section 8(b) (40 CFR Sections 710.29 and 710.28), are exempt and therefore are generally not subject to any of the reporting or recordkeeping requirements. A manufacturer (including importer) is considered a small business if (1) the firm's total annual sales when combined with those of its U.S. parent company (if any) are less than $40 million for the submission period and (2) its total production and/or importation of the chemical substances, mixture or category, for the reporting period, does not exceed 100,000 pounds (45,000 kilograms) at an individual site owned and controlled by the firm. The *Economic Analysis for the Final Inventory Update Reporting Modifications Rule* determined that the impact on these companies is, on average, significantly less than one percent of revenues (EPA, 2011).

5(d) Collection Schedule

The submission period for the 2016 collection will be from June 1, 2016 to September 30, 2016. For all subsequent collections, the submission period will be from June 1 to September 30. The submission period/schedule follows the requirements of 40 CFR 711.20.

	Federal Register Notice published
Send out e-mail to 2016 CDR e-mailing list with instructions describing how to obtain the reporting form	Early 2014
Public outreach efforts: articles in industry press, meetings with regulated community, and information on the IUR website	2014-2016
Open period for submitting 2016 CDR Forms	June 1, 2016 to September 30, 2016

6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION

This section presents the burden and cost estimates incurred by all affected entities. This ICR covers the years 2015, 2016, and 2017. Therefore, it provides burden and cost estimates for the information collection corresponding to the 2016 and 2020 reporting cycles. Even though reporting occurs only once per reporting cycle, EPA expects that rule compliance and data collection activities, and thus, costs and burdens, are incurred over the course of the reporting cycle. Therefore, for purposes of this analysis, the burden and cost for one reporting cycle are averaged over the number of years in the reporting cycle and are presented here as average annual figures. All costs are presented in year 2012 dollars. The CDR requires reporting on a "per site" basis rather than a "per company" basis. Therefore, each site which is subject to the CDR rule is considered a respondent and will submit one Form U containing one or more chemical-specific reports. Respondents are comprised of both first time CDR submitters and previous respondents who have submitted data under the previous CDR and IUR reporting cycles. EPA assumes that the burden for previous submitters will be reduced because of efficiencies achieved through the establishment of compliance processes; as described in the IUR EA (EPA, 2011). After a site's first reporting cycle, the availability of data from previous reporting cycles and the familiarity with reporting requirements will expedite future submissions.

Terms of Clearance

At the time of the most recent OMB approval of this information collection, OMB included Terms of Clearance at be addressed within the current request for approval:

"TERMS OF CLEARANCE: In accordance with 5 CFR 1320, the information collection is approved for 3 years. Upon resubmission, it is suggested the agency carefully reassess estimated burden and collection costs in light of actual burdens and costs and comments received on the rulemaking and collection request."

In preparing the current request for OMB approval, particularly with respect to the estimates of burden and cost to respondents presented below, EPA has reviewed those burdens and costs with consideration of actual experience as well as comments received from the regulated community. EPA believes that its estimates are reasonable and appropriate for the collection activities described in this information collection request.

6(a) Estimating Respondent Burden

Beginning with the 2016 reporting cycle, manufacturers (including importers), must submit a Form U for each site (including import sites) at which 25,000 pounds or more was manufactured (including import) for a chemical substance in *any* calendar year since 2011. For purposes of the ICR, one manufacturing site is equivalent to one respondent. Form U contains four Parts. Part I contains basic site identification information and must be completed by all sites. Part II contains manufacturing (including import) data (production volumes, etc.) specific to each chemical substance, which also must be completed by all sites. Together, Part I and Part II are considered a "partial report." Part III contains processing and use information and will be completed for all chemical substances unless the chemical substance is specifically exempted

from the requirement to do so. Part IV contains secondary company identification information and specific information identifying a chemical substance. Part IV is completed only by a secondary respondent (see Section 2(b)). For purposes of this analysis, burden and costs associated with Part IV are considered part of the burden and costs estimates of Part I (respondent identification) and the beginning of Part II (chemical identification), and therefore were not separately calculated. Together, Parts I, II, and III (and Part IV, when applicable) are considered a "full report." One report is submitted for each unique chemical substance/site combination; that is, a site must complete a separate report for each applicable chemical substance, but Part I of Form U is completed and submitted only once per site. EPA anticipates that Part I will be completed automatically when respondents register with CDX.

To comply with the regulation, manufacturers (including importers) must complete the activities listed in Table 2. Table 2 also provides a cross-walk of the related Information Collection that corresponds to each activity.

Table 2: Cross-Walk between Industry Activities and Related Information Collections (ICs)

Activity	Description	Related IC(s)
Compliance Determination	Site staff must determine whether reporting is required for a chemical substance manufactured (including imported) at a particular site, based on the chemical substance's production volume and the applicability of certain reporting exemptions. Submitters would report all data from 2015 and only production volume from 2012-2014. This involves determining whether the production volume of a chemical substance met or exceeded the 25,000 lb threshold in any of the calendar years since the last principal reporting year (i.e., 2012-2015).	Compliance Determination
Rule Familiarization	Site staff must familiarize themselves with the requirements of the rule. Staff from sites that reported previously must become familiar with new requirements, and staff from sites new to reporting must become familiar with all requirements. This entails reading the rule, understanding the reporting and administrative requirements, and determining how the reporting requirements will be met.	Rule Familiarization
CDX Registration	Before submitting Form U, all respondents must register with CDX. In addition, respondents must complete an Electronic Signature Agreement form, which is signed, dated, and either submitted electronically or mailed back to EPA.	CDX Registration Activities
Preparation of Reports	Site staff must collect all of the required information, and complete partial and/or full reports using a Form U report form, for each of the reportable chemical substances at that site. The information must be reviewed, and submitted to EPA. This task involves any research necessary to identify the correct information to report, the act of completing Form U (technical and clerical burden), and managerial review. Once the Form U is completed, company staff must submit it electronically to EPA via CDX.	Prepare and Submit Report, and Maintain Records - Partial Report Prepare and Submit Report, and Maintain Records - Full Report
Recordkeeping	Respondents must keep records supporting their submissions for five years.	Prepare and Submit Report, and Maintain Records - Partial Report Prepare and Submit Report, and Maintain Records - Full Report

Burden estimates were derived originally from a survey conducted by EPA in 1996 (under OMB Control No. 2070-0034) to assess the potential burden associated with the IUR, as amended at that time. The survey was distributed to previous IUR respondents selected from the IUR database. Burden estimates were updated for a 2005 amendment to the rule as described in *Economic Analysis of IUR Modifications Final Rule* (EPA, 2005)[3]. Burden estimates for new reporting elements in the final rule were derived as described in the *Economic Analysis for the Final Inventory Update Reporting (IUR) Modifications Rule* (EPA, 2011).

Table 3 and Table 4 illustrate the burden for a typical respondent on a per-activity basis, including time required to complete each section of Form U. The Agency expects data will be collected for two data collections, the 2016 and 2020 reporting cycles, during the three-year period covered by this ICR addendum. The section-by-section industry burden estimates for report preparation also include the burden of compliance determination and rule familiarization. EPA estimates the total industry burden for completing and submitting one partial report to be 56.11 hours, and the estimated burden for completing and submitting one full report, to be 139.13 hours for new submitters. EPA considers new submitters to include both staff from sites that have not previously submitted a Form U and new staff members at sites that have previously reported data under CDR. For old submitters (staff who have previously submitted Form Us), EPA estimates the total industry burden to be 25.74 hours for completing and submitting one partial report and 91.37 hours for one full report. For the purposes of this ICR, EPA assumed that all new submitters will complete CDX registration and no previous submitters will undertake any CDX registration activities.

EPA calculated burden estimates for each element of Form U individually using the 1996 survey results, economic analyses for other rules with similar requirements (such as the 2010 Premanufacture Notification Electronic Reporting final rule), and EPA's best professional judgment. More detailed information on the derivation of these estimates is found in the *Economic Analysis for the Final Inventory Update Reporting (IUR) Modifications Rule* (EPA, 2011).

[3] The economic analysis for the 2005 Amendments assumed a 15 percent reduction in burden for the completion of Part III because submitters were no longer required to report use and downstream processing information for exports.

Table 3: Total Industry Burden, by Activity, New Submitters

Activity	Clerical Burden (hours) (a)	Technical Burden (hours) (b)	Managerial Burden (hours) (c)	Total Burden (hours) (d) = (a)+(b)+(c)
PREPARATION OF REPORT (Includes rule familiarization associated with each data element)				
Part I. Site Identification Information				
Certification	0.00	0.85	1.01	1.86
Company Information (U.S. Parent Company Name, D&B Number, Mailing Address, Technical Contact, Technical Contact Mailing Address)	0.00	0.04	0.02	0.06
Plant Site Identification (Site Name, D&B Number, Mailing Address)	0.00	0.06	0.02	0.08
Information for Joint Submissions	0.00	0.00	0.01	0.01
Total for Part I	**0.00**	**0.95**	**1.06**	**2.01**
Part II. Manufacturing Information				
Site-Limited, Activity, Production Volume (lb) (2015)	0.00	2.28	0.56	2.84
Chemical Substance Identification Upfront CBI Substantiation	0.00	1.45	0.77	2.22
Accession Number Requests	0.00	0.01	0.00	0.01
Plant Site Upfront Substantiation	0.00	0.83	0.51	1.34
Total Number of Workers	0.00	1.43	0.59	2.02
Maximum Concentration, Physical Form, Percent Volume of Production	0.00	2.79	1.07	3.86
Production Volume for Each of the Years since Last Principal Reporting Year (2012-2014)	0.00	3.08	0.76	3.83
Production Volume Used On-Site	0.00	0.20	0.05	0.25
Whether Imported Chemical Substance is Physically at Reporting Site	0.00	0.11	0.03	0.14
Volume Exported	0.00	1.03	0.25	1.28
Whether a Chemical Substance is to be Recycled, Remanufactured, Reprocessed, or Reused.	0.00	0.11	0.03	0.14
Total for Part II	0.00	**13.32**	**4.60**	**17.93**
Part III. Processing and Use Information				
Upfront Substantiation for Processing and Use Information CBI Claims	0.00	0.43	0.26	0.69
Industrial Processing and Use Exposure-Related Data				
Determination of Applicability	0.00	1.01	0.28	1.29

Activity	Clerical Burden (hours) (a)	Technical Burden (hours) (b)	Managerial Burden (hours) (c)	Total Burden (hours) (d) = (a)+(b)+(c)
Industrial Function Category	0.00	4.67	2.07	6.73
Sector	0.00	0.94	0.40	1.33
Percent of Production Volume	0.00	10.00	5.27	15.27
Total Number of Processing and Use Sites	0.00	9.14	3.52	12.67
Total Number of Potentially Exposed Workers	0.00	15.43	3.83	19.26
Consumer and Commercial Use Exposure-Related Data				
Determination of Applicability	0.00	0.94	0.25	1.19
Identification of Production Category/Use by Children	0.00	1.68	0.25	1.92
Percent of Production Volume	0.00	1.26	0.45	1.71
Maximum Concentration by Category	0.00	1.36	0.34	1.70
Number of Commercial Workers Reasonably Likely to be Exposed	0.00	15.43	3.83	19.26
Total for Part III	**0.00**	**62.26**	**20.76**	**83.02**
COMPLIANCE DETERMINATION				
Compliance Determination	**0.00**	**2.50**	**0.00**	**2.50**
RULE FAMILIARIZATION				
Rule Familiarization	**0.00**	**19.00**	**9.00**	**28.00**
CDX REGISTRATION ACTIVITIES				
CDX Registration	0.00	0.73	0.18	0.92
CDX Electronic Signature Agreement	0.00	1.00	0.75	1.75
Total for CDX Registration Activities	**0.00**	**1.73**	**0.93**	**2.67**
RECORDKEEPING				
Recordkeeping	**0.75**	**1.50**	**0.75**	**3.00**
TOTAL BURDEN				
Burden for one <u>Partial</u> Report (Parts I, II, Compliance Determination, Rule Familiarization, Recordkeeping and CDX Registration Activities)	**0.75**	**39.01**	**16.34**	**56.11**
Burden for one <u>Full</u> Report (Parts I, II, III, Compliance Determination, Rule Familiarization, Recordkeeping and CDX Registration Activities)	**0.75**	**101.27**	**37.10**	**139.13**

Activity	Clerical Burden (hours) (a)	Technical Burden (hours) (b)	Managerial Burden (hours) (c)	Total Burden (hours) (d) = (a)+(b)+(c)

Note: Totals may not sum due to rounding.

Source: *Economic Analysis for the Final Inventory Update Reporting (IUR) Modifications Rule* (EPA, 2011).

Table 4: Total Industry Burden, by Activity, Old Submitters

Activity	Clerical Burden (hours) (a)	Technical Burden (hours) (b)	Managerial Burden (hours) (c)	Total Burden (hours) (d) = (a)+(b)+(c)
PREPARATION OF REPORT (Includes rule familiarization associated with each data element)				
Part I. **Site Identification Information**				
Certification	0.00	0.85	1.01	1.86
Company Information (U.S. Parent Company Name, D&B Number, Mailing Address, Technical Contact, Technical Contact Mailing Address)	0.00	0.01	0.004	0.01
Plant Site Identification (Site Name, D&B Number, Mailing Address)	0.00	0.01	0.004	0.02
Total for Part I	**0.00**	**0.87**	**1.02**	**1.89**
Part II. **Manufacturing Information**				
Site-Limited, Activity, Production Volume (lb) (2015)	0.00	1.82	0.45	2.27
Chemical Substance Identification Upfront CBI Substantiation	0.00	1.16	0.61	1.77
Plant Site Upfront Substantiation	0.00	0.66	0.41	1.07
Total Number of Workers	0.00	1.14	0.47	1.61
Maximum Concentration, Physical Form, Percent Volume of Production	0.00	2.23	0.86	3.09
Production Volume for Each of the Years since Last Principal Reporting Year (2012 - 2014)	0.00	2.46	0.60	3.07
Production Volume Used On-Site	0.00	0.16	0.04	0.20
Whether Imported Chemical Substance is Physically at Reporting Site	0.00	0.09	0.02	0.11
Volume Exported	0.00	0.82	0.20	1.02
Whether a Chemical Substance is to be Recycled, Remanufactured, Reprocessed or Reused.	0.00	0.09	0.02	0.11
Total for Part II	**0.00**	**10.66**	**3.68**	**14.34**
Part III. Processing and Use Information				
Upfront Substantiation for Processing and Use Information CBI Claims	0.00	0.43	0.21	0.64
Industrial Processing and Use Exposure-Related Data				
Determination of Applicability	0.00	0.81	0.23	1.03
Industrial Function Category	0.00	3.53	1.65	5.18
Sector	0.00	0.75	0.32	1.06
Percent of Production Volume	0.00	8.00	4.22	12.22

Activity	Clerical Burden (hours) (a)	Technical Burden (hours) (b)	Managerial Burden (hours) (c)	Total Burden (hours) (d) = (a)+(b)+(c)
Total Number of Processing and Use Sites	0.00	7.31	2.82	10.13
Total Number of Potentially Exposed Workers	0.00	12.34	3.06	15.41
Consumer and Commercial Use Exposure-Related Data				
Determination of Applicability	0.00	0.75	0.20	0.95
Identification of Production Category/Use by Children	0.00	0.67	0.20	0.87
Percent of Production Volume	0.00	1.01	0.36	1.37
Maximum Concentration by Category	0.00	1.09	0.28	1.36
Number of Commercial Workers Reasonably Likely to be Exposed	0.00	12.34	3.06	15.41
Total for Part III	**0.00**	**49.03**	**16.60**	**65.63**
COMPLIANCE DETERMINATION				
Compliance Determination	**0.00**	**2.50**	**0.00**	**2.50**
RULE FAMILIARIZATION				
Rule Familiarization	**0.00**	**2.00**	**2.00**	**4.00**
CDX REGISTRATION ACTIVITIES				
CDX Registration	0.00	0.00	0.00	0.00
CDX Electronic Signature Agreement	0.00	0.00	0.00	0.00
Total for CDX Registration Activities	**0.00**	0.00	0.00	0.00
RECORDKEEPING				
Recordkeeping	**0.75**	**1.50**	**0.75**	**3.00**
TOTAL BURDEN				
Burden for one Partial Report (Parts I, II, Recordkeeping and Submission)	**0.75**	**17.53**	**7.45**	**25.74**
Burden for one Full Report (Parts I, II, III, Recordkeeping and Submission)	**0.75**	**66.56**	**24.05**	**91.37**

Note: Totals may not sum due to rounding.

Source: *Economic Analysis for the Final Inventory Update Reporting (IUR) Modifications Rule* (EPA, 2011).

6(b) Estimating Submitter Cost

EPA multiplied burden estimates by standard wage rates for managerial, technical, and clerical levels developed from information published by the Bureau of Labor Statistics (BLS) and a method outlined in the document *Wage Rates for Economic Analyses of the Toxics Release Inventory Program* (EPA, 2002b). Wage data for the three occupational categories was gathered for manufacturing industries from *Employer Costs for Employee Compensation Supplementary Tables: Historical Data December 2006 – June 2013* (BLS, 2013a).

The cost of fringe benefits, such as health insurance and vacation, is taken for each labor category from the same ECEC series. Following the methodology outlined in (EPA, 2002b), fringe benefits are calculated as a percentage of total wages for each category. EPA added 17 percent to the wages in each category to account for overhead, based on information provided by the chemical industry and chemical industry trade associations in the *Revised Economic Analysis for the Amended Inventory Update Rule: Final Report* (EPA, 2002a). The wages for each of the three categories were then multiplied by benefits and overhead factors to estimate loaded, annual salaries in year 2012 dollars. Table 5 contains the loaded wage rates for the managerial, technical and clerical occupation categories.

Table 5: Derivation of Loaded Wage Rates for the Private Manufacturing Sector in 2012$

	Wage[1]	Fringe Benefits[1]	Fringes as % of Wage	Overhead % of Wage[2]	Fringe + Overhead Factor	Loaded Wages
	(a)	(b)	(c) = (b)/(a)	(d)	(e)=(1)+(c)+(d)	(f) = (a) x (e)
Managerial	$43.95	$21.45	48.81%	17%	1.66	**$72.87**
Technical	$38.53	$19.31	50.12%	17%	1.67	**$64.39**
Clerical	$17.64	$8.87	50.28%	17%	1.67	**$29.51**

[1] *Employer Costs for Employee Compensation Supplementary Tables: Historical Data December 2006 – June 2013,* US Bureau of Labor Statistics, November 15, 2013 (BLS, 2013a).
[2] An overhead rate of 17 percent was estimated based on industry data gathered for the *Revised Economic Analysis for the Amended Inventory Update Rule: Final Report* (EPA, 2011).

Table 6 contains the cost per activity of completing Form U for one new respondent. Burden hours presented in Table 3 were multiplied by the corresponding loaded wage rate in Table 5. EPA estimates the total cost for completing and submitting one partial report for a new submitter is $3,725 and the cost for completing and submitting one full report is $9,247. More information on the derivation of these costs is found in the IUR EA (EPA, 2011).

Similarly, Table 7 contains the cost per activity of completing Form U for one old respondent. Burden hours presented in Table 4 were multiplied by the corresponding loaded wage rate in Table 5. EPA estimates the total cost for completing and submitting one partial report for an old submitter is $1,694 and the cost for completing and submitting one full report is $6,061. More information on the derivation of these costs is found in the IUR EA (EPA, 2011).

Table 6: Total Industry Cost, by Activity, New Submitters

Activity	Clerical Cost (2012$) (a)	Technical Cost (2012$) (b)	Managerial Cost (2012$) (c)	Total Cost (2012$) (d) = (a)+(b)+(c)
PREPARATION OF REPORT (Includes rule familiarization associated with each data element)				
Part I. **Site Identification Information**				
Certification	$0.00	$54.73	$73.60	$128.33
Company Information (Company Name, Contact, Address, D&B Number, Mailing Address)	$0.00	$2.58	$1.46	$4.03
Plant Site Identification Plant Name, D&B Number Address, Mailing Address	$0.00	$3.86	$1.46	$5.32
Import Joint Submissions	$0.00	$0.29	$0.62	$0.91
Total for Part I	**$0.00**	**$61.46**	**$77.13**	**$138.60**
Part II. **Manufacturing Information**				
Site Limited, Activity, Production Volume (pounds) (2015)	$0.00	$146.81	$40.81	$187.62
Chemical Identification Up-front CBI Substantiation	$0.00	$93.37	$55.75	$149.11
Accession Number Requests	$0.00	$0.85	$0.00	$0.85
Plant Site Up-Front Substantiation	$0.00	$53.44	$37.16	$90.61
Total Number of Workers	$0.00	$92.08	$42.63	$134.71
Maximum Concentration, Physical Form, Percent Volume of Production	$0.00	$179.65	$77.97	$257.62
Production Volume for Each of the Years since Last Principal reporting Year (2012-2015)	$0.00	$198.19	$55.09	$253.28
Production Volume Used on Site:	$0.00	$12.82	$3.56	$16.38
Whether Chemical is Physically at Reporting Site	$0.00	$7.34	$2.04	$9.38
Volume Exported	$0.00	$66.06	$18.36	$84.43
Whether a Chemical is to be Recycled	$0.00	$7.34	$2.04	$9.38
Total for Part II	**$0.00**	**$857.95**	**$335.42**	**$1,193.37**
Part III. Processing and Use Information				
Upfront substantiation for Processing and Use Information CBI Claims	$0.00	$27.49	$19.12	$46.61
Industrial Processing and Use Exposure-Related Data				

Activity	Clerical Cost (2012$) (a)	Technical Cost (2012$) (b)	Managerial Cost (2012$) (c)	Total Cost (2012$) (d) = (a)+(b)+(c)
Determination of Applicability	$0.00	$64.86	$20.75	$85.61
Industrial Function Category	$0.00	$300.38	$150.52	$450.90
Function Code	$0.00	$60.20	$28.80	$89.01
Percent of Production Volume	$0.00	$643.92	$384.34	$1,028.26
Total Number of Processing and Use Sites	$0.00	$588.64	$256.74	$845.38
Total Number of Potentially Exposed Workers	$0.00	$993.38	$279.04	$1,272.42
Consumer and Commercial Use Exposure-Related Data				
Determination of Applicability	$0.00	$60.20	$18.27	$78.48
Production Category/Use by Children	$0.00	$108.05	$17.96	$126.01
Percent of Production Volume	$0.00	$81.00	$32.83	$113.83
Maximum Concentration by Category	$0.00	$87.57	$25.09	$112.66
Number of Commercial Workers Reasonably Likely to be Exposed	$0.00	$993.38	$279.04	$1,272.42
Total for Part III	**$0.00**	**$4,009.07**	**$1,512.51**	**$5,521.58**
Compliance Determination				
Compliance Determination	$0.00	$160.98	$0.00	$160.98
Rule Familiarization				
Rule Familiarization	$0.00	$1,223.41	$655.84	$1,879.26
REPORT SUBMISSION				
Submission				
CDX Registration	$0.00	$47.22	$13.36	$60.58
CDX electronic Signature	$0.00	$64.39	$54.65	$119.04
Total Submission		**$47.22**	**$13.36**	**$179.62**
RECORDKEEPING				
Recordkeeping	$22.13	$96.59	$54.65	$173.37
TOTAL Cost				
Burden for one Partial Report (Parts I, II, Compliance Determination,	**$22.13**	**$2,447.61**	**$1,136.41**	**$3,725.19**

Activity	Clerical Cost (2012$) (a)	Technical Cost (2012$) (b)	Managerial Cost (2012$) (c)	Total Cost (2012$) (d) = (a)+(b)+(c)
Rule Familiarization, Recordkeeping and CDX Registration Activities)				
Burden for one Full Report (Parts I, II, III, Compliance Determination, Rule Familiarization, Recordkeeping and CDX Registration Activities)	**$22.13**	**$6,456.68**	**$2,648.92**	**$9,246.78**

Note: Totals may not sum due to rounding.

Source: *Economic Analysis for the Final Inventory Update Reporting (IUR) Modifications Rule* (EPA 2011)

Table 7: Total Industry Cost, by Activity, Old Submitters

Activity	Clerical Costs (a)	Technical Costs (b)	Managerial Costs (c)	Total Costs (d) = (a)+(b)+(c)
PREPARATION OF REPORT (Includes rule familiarization associated with each data element)				
Part I. **Site Identification Information**				
Certification	$0.00	$54.73	$73.60	$128.33
Company Information (U.S. Parent Company Name, D&B Number, Mailing Address, Technical Contact, Technical Contact Mailing Address)	$0.00	$0.52	$0.29	$0.81
Plant Site Identification (Site Name, D&B Number, Mailing Address)	$0.00	$0.64	$0.29	$0.94
Total for Part I	**$0.00**	**$55.89**	**$74.18**	**$130.07**
Part II. **Manufacturing Information**				
Site-Limited, Activity, Production Volume (lb) (2015)	$0.00	$117.45	$32.65	$150.09
Chemical Substance Identification Upfront CBI Substantiation	$0.00	$74.69	$44.60	$119.29
Accession Number Requests	$0.00	$0.85	$0.00	$0.85
Plant Site Upfront Substantiation	$0.00	$42.76	$29.73	$72.49
Total Number of Workers	$0.00	$73.66	$34.10	$107.77
Maximum Concentration, Physical Form, Percent Volume of Production	$0.00	$143.72	$62.38	$206.10
Production Volume for Each of the Years since Last Principal Reporting Year (2012 - 2014)	$0.00	$158.55	$44.07	$202.63
Production Volume Used On-Site	$0.00	$10.25	$2.85	$13.10
Whether Imported Chemical Substance is Physically at Reporting Site	$0.00	$5.87	$1.63	$7.50
Volume Exported	$0.00	$52.85	$14.69	$67.54
Whether a Chemical Substance is to be Recycled, Remanufactured, Reprocessed or Reused.	$0.00	$5.87	$1.63	$7.50
Total for Part II	**$0.00**	**$686.53**	**$268.34**	**$954.87**
Part III. Processing and Use Information				
Upfront substantiation for Processing and Use Information CBI Claims	$0.00	$27.49	$15.29	$42.79
Industrial Processing and Use Exposure-Related Data				

Activity	Clerical Costs (a)	Technical Costs (b)	Managerial Costs (c)	Total Costs (d) = (a)+(b)+(c)
Determination of Applicability	$0.00	$51.89	$16.60	$68.49
Industrial Function Category	$0.00	$227.43	$120.41	$347.84
Function Code	$0.00	$48.16	$23.04	$71.21
Percent of Production Volume	$0.00	$515.13	$307.47	$822.61
Total Number of Processing and Use Sites	$0.00	$470.91	$205.40	$676.31
Total Number of Potentially Exposed Workers	$0.00	$794.70	$223.23	$1,017.94
Consumer and Commercial Use Exposure-Related Data				
Determination of Applicability	$0.00	$48.16	$14.62	$62.78
Production Category/Use by Children	$0.00	$43.31	$14.37	$57.68
Percent of Production Volume	$0.00	$64.80	$26.26	$91.07
Maximum Concentration by Category	$0.00	$70.06	$20.07	$90.13
Number of Commercial Workers Reasonably Likely to be Exposed	$0.00	$794.70	$223.23	$1,017.94
Total for Part III	**$0.00**	**$3,156.75**	**$1,210.01**	**$4,366.76**
COMPLIANCE DETERMINATION				
Compliance Determination	$0.00	$160.98	$0.00	$160.98
RULE FAMILIARIZATION				
Rule Familiarization	$0.00	$128.78	$145.74	$274.52
REPORT SUBMISSION				
Submission				
CDX Registration	$0.00	$0.00	$0.00	$0.00
CDX Electronic Signature	$0.00	$0.00	$0.00	$0.00
Total Submission	**$0.00**	**$0.00**	**$0.00**	**$0.00**
RECORDKEEPING				
Recordkeeping	$22.13	$96.59	$54.65	$151.24
TOTAL BURDEN				
Burden for one Partial Report (Parts I, II, Recordkeeping and	**$22.13**	**$1,128.76**	**$542.92**	**$1,693.81**

Activity	Clerical Costs (a)	Technical Costs (b)	Managerial Costs (c)	Total Costs (d) = (a)+(b)+(c)
Submission)				
Burden for one Full Report (Parts I, II, III, Recordkeeping and Submission)	**$22.13**	**$4,285.52**	**$1,752.92**	**$6,060.57**

Note: Totals may not sum due to rounding.

Source: *Economic Analysis for the Final Inventory Update Reporting (IUR) Modifications Rule* (EPA 2011)

6(c) Estimating Agency Burden and Cost

EPA is responsible for the following activities associated with administering the CDR rule:

- Document receipt and tracking;
- Quality control of data, including protection of CBI;
- Backup systems operation;
- Data processing;
- Systems development;
- Contract oversight and management;
- Publication of materials and creating pdfs of forms; and
- Operation of the TSCA Hotline to handle CDR-related calls.

Costs related to EPA activities that involve using the data are not included.

(i) EPA Staff Activities

Of the tasks listed above, Agency personnel are responsible for 1) quality control of data; and 2) data processing, systems development, and contract oversight and management. Contractors perform the other activities, as described below.

EPA estimates the total burden of completing Agency tasks to be one full-time equivalent at the GS 13 level for data processing, systems development, and contract oversight and management, per-reporting cycle. Quality control of data will be completed by GS 12 level employees. Calculations of the Agency burden are presented in *Economic Analysis for the Final Inventory Update Reporting (IUR) Modifications Rule* (EPA, 2011).

EPA labor costs are based on annual federal wage rates published by the Office of Personnel Management for the Washington-Baltimore-Northern Virginia, DC-MD-PA-VA-WV locality pay area for 2012 (OPM, 2013). Wages are presented in terms of GS-level and step. Based on previous IUR economics analyses, a Step 3 is assumed for all FTEs (EPA, 2002a and EPA, 2005). Following the methodology outlined in *Economic Analysis for the Amended Inventory Update Rule: Final Report* (EPA, 2002a), EPA added 58 percent to the wage rate to account for fringe benefits and overhead costs.

Table 8 shows the loaded wage rates for Agency staff at the GS-12 Step 3, and GS-13 Step 3 levels.

Table 8: Derivation of Loaded Agency Wage Rates (2010$)

Pay Grade	Annual Salary	Overhead and Fringe Benefits (% of wages)	Overhead and Fringe Benefit Cost	Total
GS 12 Step 3	$79,864	58%	$46,321	$126,185
GS 13 Step 3	$94,969	58%	$55,082	$150,051

Source: The unloaded Federal salary for 2010 is from the Office of Personnel Management salary table for Washington-Baltimore-Northern Virginia (OPM, 2013).

Table 9 contains the burden and cost per report for all EPA staff activities in the first and future reporting cycles. The activities performed by the GS-13 level staff member, including systems development, and contract oversight and management, are fixed costs and are not dependent on the number of reports submitted to EPA. The total fixed cost burden for systems development and contract oversight is one FTE at the GS-13 level, with a cost of $150,051. Quality control of data is performed by the GS-12 level staff member and is dependent on the number of reports received. The burden for quality control of data is approximately 0.000007 per report with no electronic signature review and 0.00001FTE per report when there is electronic signature review. The total cost per-report is approximately $0.49 with electronic signature review and $1.32 without electronic signature review. The burden and cost of processing each data element in Form U are derived in the *Economic Analysis for the Final Inventory Update Reporting (IUR) Modifications Rule* (EPA, 2011) and is approximately 0.00008 hours per data element and 0.00081 hours for reviewing electronic signature forms, per submission. EPA multiplied these burdens by the number of data elements in each section (24 in Part I, 67 in Part II, and 78 in Part III) to estimate the total cost and burden of processing each Form U. For more detail on the derivation of these burdens, see the IUR EA (EPA, 2011).

Table 9: EPA Staff Burden and Cost of Processing One Report

Activity	Agency Burden per Activity (FTE)	Agency Burden per Activity (hours)	Agency Cost per Activity (2010$)
GS-12 Step 3 per-Report Burden			
Quality Control of Data for Part I	0.0000009	0.0019	$0.12
Quality Control of Data for Part II	0.0000026	0.0054	$0.33
Quality Control of Data for Part III	0.0000030	0.0063	$0.38
Review of Electronic Signatures	0.0000039	0.0081	$0.49
Total GS-12 Burden, per report without Electronic Signature	**0.000007**	**0.0137**	**$0.83**
Total GS-12 Burden, per report with Electronic Signature	**0.000010**	**0.0218**	**$1.32**
GS-13 Step 3 Fixed Cost Burden			
Systems development, and contract oversight and management	1	2,080	$150,051
Total GS-13 Burden, per reporting cycle	**1**	**2,080**	**$150,051**

Note: Totals may not sum due to rounding.

(ii) Contractor Activities

Agency costs also include payment for extramural tasks completed by contractors (this category includes costs to EPA, but not burden hours). Contractor activities include document receipt, tracking, data review, maintaining backup systems, publication of materials, making pdfs of Form Us, and managing the TSCA Hotline, as presented in Table 10. With the exception of document receipt, tracking, and data review, all contractor costs are fixed and are not dependent on the number of reports received. All variable and fixed costs are taken from the last published ICR and were inflated from 2008 to 2012 dollars with an inflation factor calculated using the Employment Cost Index (ECI), seasonally adjusted, for management, professional, and related occupations in private industry (BLS, 2013b).

Table 10: Cost of Contractor Activities

Activity	Annual Cost 2008$	Inflation Factor	Annual Cost 2012$
Variable Costs			
Document receipt, tracking, and data review for Part I	$0.09	1.07	$0.10
Document receipt, tracking, and data review for Part II	$0.26	1.07	$0.28
Document receipt, tracking, and data review for Part III	$0.30	1.07	$0.32
Total Cost of Document receipt, tracking, and data review, per full report	**$0.65**	1.07	**$0.70**
Fixed Costs			
Maintaining and Operating Back Up Systems	$59,145	1.07	$63,385
Publication of materials and making a pdf of all Form U's.	$5,525	1.07	$5,921
Managing the TSCA Hotline	$44,694	1.07	$47,898
Total Fixed Cost	**$109,364**	1.07	**$117,204**

6(d) Bottom-Line Industry Burden and Cost Estimates

This section describes the estimated social burden and cost of paperwork over the three year ICR period. The next CDR submission period will occur in 2016 for chemical substances manufactured (including imported) during the calendar years 2012-2015. Even though reporting occurs only once every 4 years, EPA expects rule compliance and data collection activities, and thus, costs and burdens, are incurred over the course of the reporting cycle. Therefore, for purposes of this analysis, the burden and cost for one reporting cycle are averaged over the number of years in the reporting cycle and are presented here as average annual figures. This ICR supporting statement is for the three-year period of 2015 through 2017; therefore, average annual figures for each of these three years are presented below.

Respondent Tally

EPA calculated the numbers of expected sites and reports for the 2016 reporting cycle submitted based on submission information from the April 2013 version of the CDR database, which contains data from the most recent (2012) CDR collection. This database contained 32,358 reports from 4,753 sites on 7,674 chemicals. However, due to changes in reporting requirements between the 2012 and 2016 reporting cycle, EPA expects an increase in the number of sites reporting data, and the number of full and partial reports. Beginning with the 2016 EPA is lowering the reporting threshold for chemicals subject to certain TSCA orders from 25,000 pounds to 2,500 pounds and based on past data, expects that this will increase the number of chemicals with reports by 1,211 chemicals and the number of reports by 5,106 reports.[4,5] EPA is also requiring that sites must report on chemicals exceeding the reporting threshold in *any* calendar year since the last principal reporting year, and not just if the threshold is exceeded in the reporting year. EPA anticipates a 5 percent increase in the number of reporting sites and reports submitted as a result of this modification (EPA, 2011). Finally, EPA is lowering the threshold for reporting downstream processing and use information from 100,000 pounds to 25,000 pounds (or 2,500 pounds for chemicals subject to certain TSCA actions). This means that, with the exception of reports for the 708 chemicals exempt from reporting downstream processing a use information (approximately 2,985 reports),[6] all reports submitted will be full reports (See Appendix C of the *Instructions for the 2012 TSCA Chemical Data Reporting* (EPA, 2012) for a list of partially exempt chemicals).[7] After accounting for all these changes, EPA expects that 4,991 sites will submit 39,337 reports (36,352 full reports and 2,985 partial reports) in both the 2016 and 2020 reporting cycle. Table 11 contains a derivation of these numbers.

[4] To calculate the number of chemicals subject certain TSCA orders that will report under CDR, EPA first counted 1,345 CAS and accession numbers subject to TSCA sections 5(a)(2), 5(b)(4), or 6; a consent agreement developed under the procedures of 40 CFR part 790; an order issued under section 5(e) or 5(f) of TSCA; or relief that has been granted under a civil action under TSCA sections 5 or 7, as listed in Appendix B of the *Instructions for the 2012 TSCA Chemical Data Reporting* (EPA, 2012). Then using assumptions presented in *Economic Analysis for the Final Inventory Update Reporting (IUR) Modifications Rule* (EPA, 2011) EPA assumed that 90% of these chemicals or 1,278 new chemicals have a production volume between 2,500 and 25,000 pounds and will be reported under CDR.
[5] To calculate the number of new reports resulting from the lowering of the reporting threshold for chemicals subject to certain TSCA Sections EPA multiplied the number of new chemicals that will now report under CDR, 1,278, by the average number of reports per chemical, 4.217, for a total of 5,389 new reports.
[6] To calculate the number of reports submitted for the partially exempt chemicals EPA multiplied the number of new partial exempt chemicals, 708, by the average number of reports per chemical, 4.217, for a total of 2,985 reports.
[7] To calculate the number of reports submitted for the partially exempt chemicals EPA multiplied the number of new partial exempt chemicals, 708, by the average number of reports per chemical, 4.217, for a total of 2,985 reports.

Table 11: Number of Sites and Reports in the 2016 and 2020 Reporting Cycles

Modification	Number of Sites	Number of Reports	Number of Full Reports
Baseline (2012 CDR data)	**4,753**	**32,358**	**20,348**
Step 1: Consider the 25,000 lb Threshold for Specific Regulated Chemical Substances to 2,500 lb			
Reduce the 25,000 lb Threshold for Specific Regulated Chemical Substances to 2,500 lb (1,278 more chemicals will report resulting in 5,389 reports)	--	5,106	--
STEP 1 TOTAL	**4,753**	**37,464**	--
Step 2: Account for change in the method for determining whether you are subject to the CDR reporting requirements			
Method for Determining Whether you are Subject to the IUR Reporting Requirements (5% increase in the number of sites and reports)	238	1,873	--
STEP 2 TOTAL	**4,991**	**39,337**	--
Step 3: Consider the effect of replacing the 300,000 lb threshold for processing and use reporting			
Total Number of Reports from Step 2 (39,634 minus the number of reports for partially exempt chemicals, 2,985)	--	--	36,352
TOTAL	**4,991**	**39,337**	**36,352**

Note: Totals may not sum due to rounding

As stated above, EPA assumes that the burden for previous submitters will be reduced because of efficiencies achieved through familiarity with the reporting process. Therefore, EPA must account for the number of "new" and "old" sites and technical contacts reporting under the 2016 and 2020 CDR reporting cycles. Therefore, EPA used Toxics Release Inventory (TRI) data to estimate the number of new staff (either at a site new to CDR reporting or a technical contact at a site that has previously submitted data) reporting CDR data each year. EPA calculated the number of new sites reporting to TRI each year between 2009 and 2012, for the Chemical Manufacturing (325) and Petroleum and Coal Products Manufacturing (324) NAICS codes and estimated that approximately 5.16 percent of all reporters are "new" submitters. EPA applied this percentage to the 2012 CDR data and estimates that there will be 258 new respondents and 4,733 old respondents will respond in the 2016 reporting cycle and 2020 reporting cycles, for a total of 4,991 submitters. EPA expects a total of 154 partial reports from new submitters and 2,831 partial reports from old submitters and 1,879 full reports from new submitters and 34,473 full reports from old submitters.[8]

[8] To calculate the number of partial reports attributable to new and old submitters EPA first calculated the number of partial reports per submitter, 0.60 (2,985/4,991), and multiplied that number by the total of new and old submitters respectively. Similarly to calculate number full submitted by new and old submitters, the number of full reports per submitter, 7.34 (36,694/4,991), was multiplied that number by the total of new and old submitters.

Table 12: Number of New and Old Sites Reporting Data in the 2016 and 2020 Reporting Cycles

	Sites	Partial Reports	Full Reports	Total Reports
New Submitters	258	154	1,879	**2,033**
Old Submitters	4,733	2,831	34,473	**37,304**
Total	**4,991**	**2,985**	**36,352**	**39,337**

Note: Totals may not sum due to rounding

Each site is expected to submit an average of 7.28 full reports and 0.60 partial reports in the 2016 and 2020 reporting cycles. The average burden per new respondent is estimated to be 804 hours per cycle, or 201 hours annually. The average burden per old respondent is estimated to be 623 hours per cycle, or 156 hours annually. This is higher than the burden estimated for the currently approved ICR due to both program changes and an adjustment in reporting requirement criteria, including additional data requirements and modifications to reporting thresholds.

Total Industry Burden/Cost for New Submitters. EPA estimates the total industry burden per reporting cycle for new submitters to be 207,612 hours. Given that this data collection is part of a four-year reporting cycle, EPA estimates the annual industry burden for 2015, 2016, and 2017 to be 51,903 hours. As presented in Table 13, EPA estimates the total cost to industry of a four-year reporting cycle to be $13.8 million or an annual cost of $3.44 million.

Table 13: Estimated Respondent Burden and Cost for New Submitters

Activity	Total Burden per Activity (hours)	Total Number of Units	Total Cost per Activity (2012$)	Total Burden per Reporting Cycle (hours)	Total Cost per Reporting Cycle (2008$)	Annual Burden (hours)	Annual Cost (2012$)
Compliance Determination (per Site)	2.50	258 Sites	$161	645	$41,532	**161**	**$10,383**
Rule Familiarization (per Site)	28.00	258 Sites	$1,879	7,224	$484,848	**1,806**	**$121,212**
CDX Registration Activities (per Site)	2.67	258 Sites	$180	688	$46,343	**172**	**$11,586**
Part I Preparation	2.01	258 Sites	$139	519	$35,758	**130**	**$8,940**
Partial Report Preparation	17.93	154 Partial Reports	$1,193	2,761	$183,779	**690**	**$45,945**
Full Report Preparation	100.95	1,879 Full Reports	$6,715	189,676	$12,617,402	**47,419**	**$3,154,351**
Recordkeeping	3.00	2,033 Reports	$173	6,099	$352,462	**1,525**	**$88,115**
Total Industry Burden and Cost for New Reporters				**207,612**	**$13,762,124**	**51,903**	**$3,440,531**

Note: Totals may not sum due to rounding

Total Industry Burden and Cost for Old Submitters. EPA estimates the total industry burden per reporting cycle for old submitters to be 2.95 million hours. Given that this data collection will occur every four years, EPA estimates the annual industry burden to be 737,300 hours. As presented in Table 14, EPA estimates the total cost to industry per reporting cycle would be $194 million, or an annual cost of $48.6 million

Table 14: Estimated Annual Respondent Burden and Cost for Old Submitters

Activity	Total Burden per Activity (hours)	Total Number of Units	Total Cost per Activity (2012$)	Total Burden per Reporting Cycle (hours)	Total Cost per Reporting Cycle (2008$)	Annual Burden (hours)	Annual Cost (2012$)
Compliance Determination (per Site)	2.50	4,733 Sites	$161	11,833	$761,896	**2,958**	**$190,474**
Rule Familiarization (per Site)	4.00	4,733 Sites	$275	18,932	$1,299,318	**4,733**	**$324,830**
CDX Registration Activities (per Site)	0.00	4,733 Sites	$0	0	$0	**0**	**$0**
Part I Preparation	1.89	4,733 Sites	$130	8,955	$615,639	**2,239**	**$153,910**
Partial Report Preparation	14.34	2,831 Partial Reports	$955	40,609	$2,703,231	**10,152**	**$675,808**
Full Report Preparation	79.97	34,473 Full Reports	$5,322	2,756,961	$183,452,459	**689,240**	**$45,863,115**
Recordkeeping	3.00	37,304 Reports	$151	111,912	$5,641,811	**27,978**	**$1,410,453**
Total Industry Burden and Cost for the First Reporting Cycle				**2,949,201**	**$194,474,355**	**737,300**	**$48,618,589**

Note: Totals may not sum due to rounding

Annual Industry Burden and Cost for All Submitters. As shown in Table 15, EPA calculated the estimated total annual respondent burden and cost associated with this ICR by summing the burdens and costs for new and old submitters. The total annual burden associated with this ICR renewal is 789,203 hours. The total annual cost is $52,059,120.

Table 15: Estimated Annual Average Burden and Cost Associated with this ICR

Activity	New Submitters		Old Submitters		Total	
	Annual Burden (hours)	**Annual Cost (2012$)**	**Annual Burden (hours)**	**Annual Cost (2012$)**	**Annual Burden (hours)**	**Annual Cost (2012$)**
Compliance Determination (per Site)	161	10,383	2,958	190,474	**3,119**	**$200,857**
Rule Familiarization (per Site)	1,806	121,212	4,733	324,830	**6,539**	**$446,042**
CDX Registration Activities	172	11,586	0	0	**172**	**$11,586**
Part I Preparation (per Site)	130	8,940	2,239	153,910	**2,369**	**$162,849**
Partial Report Preparation (Part II)	690	45,945	10,152	675,808	**10,842**	**$721,753**
Full Report Preparation (Part II and Part III)	47,419	3,154,351	689,240	45,863,115	**736,659**	**$49,017,465**
Recordkeeping (per Report)	1,525	88,115	27,978	1,410,453	**29,503**	**$1,498,568**
Total	**51,903**	**$3,440,531**	**737,300**	**$48,618,589**	**789,203**	**$52,059,120**

Average Burden and Cost per Site. As shown in Table 16, the Agency estimates the typical respondent burden for this information collection activity to be 803 hours for new submitters and 623 hours for old submitters. Given that a collection will occur once every four years, the average annual burden is 201 hours for new submitters and 156 hours for old submitters. These burden estimates assume each site will submit an average of 7.28 full reports and 0.60 partial reports. This is a decrease of 0.66 partial reports per site and an increase of 2.21 full reports per site compared to the average number of reports completed per site presented in the currently approved ICR.

Table 16: Average Burden per Site

Activity	Burden Hours			Total Hours per Activity	Reports per Average Site	Total Burden (hours per average site)	Annual Burden (hours per average site)
	Clerical	Technical	Managerial				
New Submitters							
Rule Familiarization, Compliance Determination, CDX Registration Activities and Part I Preparation	0.00	23.45	10.81	34.26	1	**34.26**	**8.57**
Partial Report Preparation (Part II,	0.00	13.32	4.60	17.93	0.60	**10.72**	**2.68**
Full Report Preparation (Part II and Part III,	0.00	75.59	25.36	100.95	7.28	**735.24**	**183.81**
Recordkeeping	0.75	1.50	0.75	3.00	7.88	**23.65**	**5.91**
Total Hours						**803.87**	**200.97**
Old Submitters							
Rule Familiarization, Compliance Determination, CDX Registration Activities and Part I Preparation	0.00	5.37	3.02	8.39	1.00	**8.39**	**2.10**
Partial Report Preparation (Part II, per Report)	0.00	10.66	3.68	14.34	0.60	**8.58**	**2.15**
Full Report Preparation (Part II and Part III, per Report)	0.00	59.69	20.29	79.97	7.28	**582.49**	**145.62**
Recordkeeping (per Report)	0.75	1.5	0.75	3.00	7.88	**23.65**	**5.91**
Total Hours						**623.11**	**155.78**

Table 17 presents the average cost per site, by activity, for a CDR respondent. EPA estimates the average site will submit 7.28 full reports and 0.60 partial reports in each reporting cycle. New sites are expected to incur a total cost of $53,287 for Form U completion and submission and olds sites will incur a cost of $41,263per submission.

Table 17: Average Cost per Site

Activity	Cost ($2012)			Total Cost per Activity	Reports per Average Site	Total Burden (Cost per average site)	Annual Burden (Cost per average site)
	Clerical	Technical	Managerial				
New Submitters							
Rule Familiarization, Compliance Determination, CDX Registration Activities and Part I Preparation	$0	$1,510	$788	$2,298	1	**$2,298**	**$574**
Partial Report Preparation (Part II,	$0	$858	$335	$1,193	0.60	**$714**	**$178**
Full Report Preparation (Part II and Part III,	$0	$4,867	$1,848	$6,715	7.28	**$48,908**	**$12,227**
Recordkeeping	$22.13	$96.59	$54.65	$173	7.88	**$1,366**	**$342**
Total Cost						**$53,287**	**$13,322**
Old Submitters							
Rule Familiarization. Compliance Determination, CDX Registration Activities and Part I Preparation	$0	$346	$220	$566	1	**$566**	**$141**
Partial Report Preparation (Part II, per Report)	$0	$687	$268	$955	0.60	**$571**	**$143**
Full Report Preparation (Part II and Part III, per Report)	$0	$3,843	$1,478	$5,322	7.28	**$38,760**	**$9,690**
Recordkeeping (per Report)	$22.13	$96.59	$54.65	$173	7.88	**$1,366**	**$342**
Total Cost						**$41,263**	**$10,316**

Table 18 presents the annual burden hours, organized by information collection, and annual averages for the ICR period (2015-2017), for CDR respondents.

Table 18: Annual Information Collection Tally for New and Old Submitters

Information Collection	No. of Respondents	No. of Responses / Respondent	Responses Subtotal	Annual Burden Hours per Response	Annual Burden Hours Subtotal
New Submitters					
Compliance Determination	258	1.0	258.0	0.63	161
Rule Familiarization	258	1.0	258.0	7.00	1,806
CDX Registration Activities	258	1.0	258.0	0.67	172
- *CDX Registration*	258	*1.0*	258.0	*0.23*	59
- *ESA*	258	*1.0*	258.0	*0.44*	113
Prepare Part I of Form U	258	1.0	258.0	0.50	130
Prepare and Submit Report, and Maintain Records – Partial Report	258	0.60	154.0	5.23	806
- *Part II of Form U*	258	*0.60*	154.0	*4.48*	690
- *Recordkeeping*	258	*0.60*	154.0	*0.75*	116
Prepare and Submit Report, and Maintain Records - Full Report	258	7.28	1,879.0	25.99	48,828
- *Part II and III of Form U*	258	*7.28*	1,879.0	*25.24*	47,419
- *Recordkeeping*	258	*7.28*	1,879.0	*0.75*	1,409
Old Submitters					
Compliance Determination	4,733	1	4,733	0.63	2,958
Rule Familiarization	4,733	1	4,733	1	4,733
CDX Registration Activities	4,733	0	0	0	0
- *CDX Registration*	*4,733*	*0*	*0*	*0*	*0*
- *ESA*	*4,733*	*0*	*0*	*0*	*0*
Prepare Part I of Form U	4,733	1	4,733	0.47	2,239
Prepare and Submit Report, and Maintain Records – Partial Report	4,733	0.60	2,831	4.34	12,275
- *Part II of Form U*	4,733	*0.60*	2,831	*3.59*	10,152
- *Recordkeeping*	4,733	*0.60*	2,831	*0.75*	2,123
Prepare and Submit Report, and Maintain Records - Full Report	4,733	7.28	34,473	20.74	715,095
- *Part II and III of Form U*	*4,733*	*7.28*	34,473	*19.99*	*689,240*

Information Collection	No. of Respondents	No. of Responses / Respondent	Responses Subtotal	Annual Burden Hours per Response	Annual Burden Hours Subtotal
- *Recordkeeping*	*4,733*	*7.28*	*34,473*	*0.75*	*25,855*
Average Annual Burden, All Submitters					
Compliance Determination	4,991	1	4,991	0.63	3,119
Rule Familiarization	4,991	1	4,991	1.31	6,539
CDX Registration Activities	258	1	258	0.67	172
- *CDX Registration*	258	*1*	258	0.23	59
- *ESA*	258	*1*	258	0.44	113
Prepare Part I of Form U	4,991	1	4,991	0.47	2,369
Prepare and Submit Report, and Maintain Records – Partial Report	4,991	0.60	2,986	4.38	13,081
- *Part II of Form U*	4,991	0.60	2,986	3.63	10,842
- *Recordkeeping*	4,991	0.60	2,986	0.75	2,239
Prepare and Submit Report, and Maintain Records - Full Report	4,991	7.28	36,352	21.01	763,923
- *Part II and III of Form U*	4,991	7.28	36,352	20.26	736,659
- *Recordkeeping*	4,991	7.28	36,352	0.75	27,264
Totals			54,569	14.46	789,203

Some burden estimate subtotals may not calculate due to rounding of unit burden estimates

Table 19 presents the total burden hours for the ICR period (2015-2017), organized by information collection, for CDR respondents.

Table 19: Total Information Collection Tally for ICR Reporting Period (2015-2017)

Information Collection	No. of Respondents	No. of Responses / Respondent	Responses Subtotal	Total Burden Hours per ICR Period	Burden Hours Subtotal
New Submitters					
Compliance Determination	258	1	258	1.88	484
Rule Familiarization	258	1	258	21.00	5,418
CDX Registration Activities	258	1	258	2.00	516
- *CDX Registration*	258	*1*	258	0.69	177
- *ESA*	258	*1*	258	1.31	339

Information Collection	No. of Respondents	No. of Responses / Respondent	Responses Subtotal	Total Burden Hours per ICR Period	Burden Hours Subtotal
Prepare Part I of Form U	258	1	258	1.51	390
Prepare and Submit Report, and Maintain Records – Partial Report	258	0.60	154	15.70	2,417
- *Part II of Form U*	258	*0.60*	154	13.45	2,071
- *Recordkeeping*	258	*0.60*	154	2.25	347
Prepare and Submit Report, and Maintain Records - Full Report	258	7.28	1,879	77.96	146,485
- *Part II and III of Form U*	258	*7.28*	1,879	75.71	142,257
- *Recordkeeping*	258	*7.28*	1,879	2.25	4,228
Old Submitters					
Compliance Determination	4,733	1	4,733	1.88	8,874
Rule Familiarization	4,733	1	4,733	3.00	14,199
CDX Registration Activities	4,733	0	0	0.00	0
- *CDX Registration*	4,733	*0*	0	0.00	0
- *ESA*	4,733	*0*	0	0.00	0
Prepare Part I of Form U	4,733	1	4,733	1.42	6,716
Prepare and Submit Report, and Maintain Records – Partial Report	4,733	0.60	2,831	13.01	36,826
- *Part II of Form U*	4,733	*0.60*	2,831	10.76	30,457
- *Recordkeeping*	4,733	*0.60*	2,831	2.25	6,370
Prepare and Submit Report, and Maintain Records - Full Report	4,733	7.28	34,473	62.23	2,145,285
- *Parts II and III of Form U*	4,733	*7.28*	34,473	59.98	2,067,720
- *Recordkeeping*	4,733	*7.28*	34,473	2.25	77,564
Average Burden for ICR Period, All Submitters					
Compliance Determination	4,991	1	4,991	1.88	9,358
Rule Familiarization	4,991	1	4,991	3.93	19,617
CDX Registration Activities	258	1	258	2.00	516
- *CDX Registration*	258	*1*	258	0.69	177
- *ESA*	258	*1*	258	1.31	339
Prepare Part I of Form U	4,991	1	4,991	1.42	7,106

Information Collection	No. of Respondents	No. of Responses / Respondent	Responses Subtotal	Total Burden Hours per ICR Period	Burden Hours Subtotal
Prepare and Submit Report, and Maintain Records – Partial Report	4,991	0.60	2,986	13.14	39,244
- *Part II of Form U*	4,991	0.60	2,986	10.89	32,527
- *Recordkeeping*	4,991	0.60	2,986	2.25	6,716
Prepare and Submit Report, and Maintain Records - Full Report	4,991	7.28	36,352	63.04	2,291,770
- *Parts II and III of Form U*	4,991	7.28	36,352	60.79	2,209,978
- *Recordkeeping*	4,991	7.28	36,352	2.25	81,792

Some burden estimate subtotals may not calculate due to rounding of unit burden estimates

Agency Tally

Table 20 presents the Agency costs associated with the CDR rule. EPA multiplied the costs per report by the total number of Parts I, II, and III to calculate the total burden and cost associated with the number of reports EPA expects to be submitted. For each reporting cycle the total burden is 0.208 FTEs and the total cost is $48.152 for variable cost activities. The burden and cost of the fixed cost activities remains unchanged by the number of reports submitted; the total fixed burden is one FTE per reporting cycle and the cost is $150,051. The total Agency burden is 1.21 FTEs and the estimated total cost incurred by the Agency is $198,203. The total agency cost and burden was calculated by summing the Agency staff and contractor activities.

Table 20: Total Cost and Burden of Agency Activities, per Reporting Cycle

Activity	Staff	Form U Section	Total Burden per Activity (FTE)	Total Number of Units	Total Cost per Activity (2012$)	Total Burden (FTE)	Total Cost (2012$)
Variable Burdens and Costs							
Document receipt, tracking, and data review	Contractor	Part I	N/A	4,991 Sites	$0.10	N/A	$493
		Part II	N/A	37,464 Part IIs	$0.28	N/A	$10,338
		Part III	N/A	34,479 Part IIIs	$0.32	N/A	$11,076
Quality Control of Data	EPA Employee (GS-12 Step 3)	Part I	0.0000009	4,991 Sites	$0.12	0.005	$588
		Part II	0.0000026	37,464 Part IIs	$0.33	0.098	$12,324
		Part III	0.0000030	34,479 Part IIIs	$0.38	0.105	$13,205
		Electronic Signature Agreements	0.0000039	258 Sites	$0.49	0.001	$127
			Total Variable Cost and Burden			**0.208**	**$48,152**
Fixed Burdens and Costs							
Data Processing, Systems Development, and Contract Oversight and Management	EPA Employee (GS-13 Step 3)	N/A	N/A	N/A	N/A	1.000	$150,051
Maintaining and Operating Back Up Systems	Contractor	N/A	N/A	N/A	N/A	N/A	N/A
Printing and Publishing Forms and Materials	Contractor	N/A	N/A	N/A	N/A	N/A	N/A
Managing the TSCA Hotline	Contractor	N/A	N/A	N/A	N/A	N/A	N/A
				Total Fixed Cost and Burden		**1**	**$150,051**
Total Agency Cost and Burden						**1.21**	**$198,203**

6(e) Reasons for Change in Burden

EPA estimates industry will incur an increase of 315,080 hours in annual burden compared to the estimate in the information collection request most recently approved by OMB

(from 474,123 hours to 789,203 hours). Differences in burden and costs from the previous ICR are attributed to both program and adjustments changes. Adjustments capture changes in the baseline burden not included in the currently approved ICR. These changes result from updates to the number of affected sites and wages and the correction of estimates in the previous ICR. Program changes account for changes in reporting requirements between the 2012 and 2016 reporting cycles.

Adjustment Changes

The currently approved ICR used data from the 2006 IUR to estimate the number of sites and partial and full reports submitted to EPA. EPA ICR No. 1884.06 estimated that a total of 4,153 sites would submit 3,696, partial reports and 23,838 full reports over the ICR period. EPA has adjusted the number of sites and reports using data from the April 2013, 2012 CDR database where a total of 4,753 sites submitted 12,010 partial reports and 20,348 full reports.

The previous ICR assumed all reporters would complete CDX registration activities; however, because CDX registration is a one-time action, EPA assumes that after a site's first reporting cycle, submitters will not incur any burden or cost for this IC activity. Therefore, this ICR calculates separate costs for new submitters who incur CDX registration and electronic signature burdens and for old submitters who have already incurred these costs.

The previous ICR covered parts of the 2012 and 2016 reporting cycles, therefore EPA assumed that all submitters would incur the larger "new" submitter burden in the first two years of the analysis and all submitters would incur the smaller "old" submitter burden in the last year of the analysis. For this ICR EPA assumed that approximately 95% of submitters would incur the lower "old" submitter burden for all three years. In addition, annual burden for the previous ICR partially covered portions of two reporting cycles, including two years of 2012 cycle reporting and one year of 2016 cycle reporting. The burden for the previous ICR averaged the annual burden over a six year period for 2012 reporting cycle and over a four year period for the 2016 burden and included a portion of the hours for each of those cycles. Because the 2016 and 2020 reporting cycles are 4 years, EPA adjusted the baseline burden estimates be averaged over a four year period only.

All costs were inflated from 2008$ to 2012$, which slightly increased the costs associated with the rule.

The total of all of the adjustments results in an increase of the baseline total burden of 2,573 hours and an increase in the annual burden of 858 hours.

Program Changes

Beginning with the 2016 reporting cycle, EPA is lowering the reporting threshold for chemicals subject to certain TSCA orders from 25,000 pounds to 2,500 pounds, requiring that sites must report on chemicals exceeding the reporting threshold in *any* calendar year since the last principle reporting year, and is lowering the threshold for reporting downstream processing and use information from 100,000 pounds to 25,000 pounds. After accounting for all these

changes, EPA expects that the number of sites and full reports submitted will increase, and there will be a decrease in the number of partial reports submitted, for a total of 4,991 sites submitting 39,337 reports (36,352 full reports and 2,985 partial reports).

In addition, beginning with the 2016 reporting cycle, sites will be required to submit production volumes for all years in the reporting cycle, as opposed to the production volume for just the reporting year. This will slightly increase the burden for completing Part II of Form U.

The program changes results in an increase of the baseline total burden of 942,684 hours and an increase in the annual burden of 314,228 hours.

Table 21: Total Estimate of Annual Burden Hours and Annualized Cost Comparisons

	Annual Burden Hours
Current OMB inventory	**474,122**
Change in burden due to adjustments	852
Change in burden due to program changes	314,228
Total change in burden	*315,080*
Total Burden	**789,203**

6(f) Burden Statement

The annual public burden for this collection of information, which is approved under OMB Control No. 2070-0162, is estimated to average about 14.5 hours per response, which may include reporting on multiple chemicals. Burden is defined in 5 CFR 1320.3(b). An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in title 40 of the CFR, after appearing in the Federal Register when approved, are listed in 40 CFR Part 9, and are displayed either by publication in the Federal Register or by other appropriate means, such as on the related collection instrument or form, if applicable.

The Agency has established a public docket for this ICR under Docket ID No. EPA-HQ-OPPT-2013-0721, which is available for online viewing at www.regulations.gov, or in-person viewing at the Pollution Prevention and Toxics Docket in the EPA Docket Center (EPA/DC). The EPA/DC Public Reading Room is located in the EPA West Building, Room 3334, 1301 Constitution Ave., N.W., Washington, DC. The EPA/DC Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the EPA/DC Public Reading Room is (202) 566-1744, and the telephone number for the Pollution Prevention and Toxics Docket is (202) 566-0280.

You may submit comments regarding the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden, including the use of automated collection techniques. Submit your comments, referencing Docket ID No. EPA-HQ-OPPT-2013-0721 and OMB Control No. 2070-0162, to (1) EPA online using www.regulations.gov (our preferred method), or by mail to: Pollution Prevention and Toxics Docket, Environmental Protection Agency Docket Center (EPA/DC), Mail code: 28221T, 1200 Pennsylvania Ave., N.W., Washington, D.C. 20460, and (2) OMB by mail to: Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attention: Desk Officer for EPA, 725 17th Street, N.W., Washington, D.C. 20503.

ATTACHMENTS

Attachment 1 - Toxic Substances Control Act, Section 8 - 15 USC 2607

Attachment 2 - TSCA Chemical Data Reporting Requirements - 40 CFR 711

Attachment 3 - IUR Form U (EPA Form 7740-8)

Attachment 4 - Public Comments Received and EPA Response to Comments

Attachment 5 - Copy of Consultations Message Sent by EPA to Potential Respondents

Sources

BLS 2013a. U.S. Bureau of Labor Statistics. *Employer Costs for Employee Compensation Supplementary Tables: Historical Data December 2006 – June 2013.* (November 15, 2013). http://www.bls.gov/ncs/ect/sp/ecsuphst.pdf.

BLS, 2013b. U.S. Bureau of Labor Statistics. *Employment Cost Index.* Total compensation, private industry, index number, Management, professional, and related, seasonally adjusted. (November 22, 2013). http://data.bls.gov/pdq/querytool.jsp?survey=ci.

EPA, 2002a. U.S. EPA, Office of Pollution Prevention and Toxics, Economic and Policy Analysis Branch. *Economic Analysis for the Amended Inventory Update Rule: Final Report (EPA-HQ-OPPT-2002-0054-0260).* August 2002.

EPA, 2002b. U.S. EPA, Office of Pollution Prevention and Toxics, Economic and Policy Analysis Branch. *Wage Rates for Economic Analysis of the Toxics Release Inventory Program.* June 10, 2002.

EPA, 2005. U.S. EPA, Office of Pollution Prevention and Toxics, Economic and Policy Analysis Branch. *Economic Analysis of IUR Modifications Final Rule (EPA-HQ OPPT 2004-0106-0055*). July 2005.

EPA, 2006. US EPA, Office of Pollution Prevention and Toxics, *Instructions for Reporting for the 2006 Partial Updating of the TSCA Chemical Inventory Database*. Nov. 2006. Available at http://www.epa.gov/iur/pubs/2006_inst_tsca_cheminv.pdf.

EPA, 2007. U.S. EPA, Office of Environmental Information. *A Business Case Analysis of EPA's Central Data Exchange*. March, 2007.

EPA, 2008. U.S. EPA, Office of Pollution Prevention and Toxics, Information Management Division, *2006 IUR Database Statistics for IUR Modifications Rule*. Washington, DC. December 17, 2008.

EPA, 2009a. U.S. EPA, Office of Pollution Prevention and Toxics. *TSCA Section 4 Federal Register Enforceable Consent Agreements.* http://www.epa.gov/oppt/chemtest/pubs/4eca.html. Washington, DC. Updated October 1, 2009.

EPA, 2009b. U.S. EPA, Office of Pollution Prevention and Toxics, *Sunset Dates of Chemicals Subject to Final TSCA Section 4 and Related 12(b) Actions, Modified on September 1, 2009.* http://www.epa.gov/oppt/chemtest/pubs/sunset.html. Washington, DC. Updated September 1, 2009.

EPA, 2010. TSCA Section 5 Premanufacture and Significant New Use Notification Electronic Reporting; Revisions to Notification Regulations; Final rule. *Federal Register* (75 FR 773-790), January 6, 2010)

EPA, 2011. U.S. EPA, Office of Pollution Prevention and Toxics, Economic and Policy Analysis Branch. *Economic Analysis for the Final Inventory Update Reporting (IUR) Modifications Rule*. June, 2011.

EPA, 2012. *ICR No. 1884.06. [Information Collection Request for]* Partial Update of the TSCA Section 8(b) Inventory Data Base, Production and Site Report *Supporting Statement for a Request for OMB Review under the Paperwork Reduction Act*. January 27, 2012. EPA-HQ-OPPT-2009-0187.

EPA, 2013. Toxics Release Inventory. 2012 National Analysis dataset. Accessed from http://iaspub.epa.gov/triexplorer/tri_release.chemical

OPM, 2013. Office of Personnel Management, *Salary Table 2010-DCB, Washington Baltimore-Northern Virginia, DC-MD-PA-VA-WV.* Accessed from http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2013/general-schedule/dcb.pdf.